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Address

THE PROGRESS OF MEDICINE IN THE PHILIPPINE ISLANDS.*

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MANILA, P. I.

The health of any community, or of any country, is its most valuable asset. The truth of this proposition applies with special force to the Philippine Islands, where so much has been lost, so much delayed, and so much is to be gained by health conditions. If cholera, rinderpest and surra had not appeared in these islands, the historian would have had quite a different story to tell. These diseases are, in a large measure, responsible for the depression in business, the timidity of capital, and the spirit of unrest of which we have already heard too much.

Medical science holds the key to the prosperity of the Philippine Islands, and on every doctor here rests an individual responsibility so great that its magnitude can not be measured. Whatever may be the relative importance of the medical man in other parts of the world, he, and the profession he represents, stands first in this country. To be without health is to be without earning capacity. Public health is an economic asset of the highest possible value, contributing to the economic strength of the people, furnishing the foundation on which the entire superstructure of municipal credit and life is built. A strong people, relieved of unnecessary burdens caused by sickness and death, can bear other and larger burdens which will give them a commanding lead in this age of commercialism.

Medical progress in the Philippine Islands may be divided into three periods: The first, beginning with the Spanish occupation and extending down to 1876; the second, dating from 1876 to 1898, and the third, beginning with the American occupation and extending to the present time.

During the first period the physicians were imported, and, to a large extent, under church or governmental control. They came and they went, each contributing something to impress on a mistrusting people the beneficent intentions of the most charitable and self-sacrificing profession the world has yet known. In reviewing the history of the physicians of that period, the conclusion is forced on us that they, and the government under which they served, can not be given too much credit for maintaining the profession on a regular, ethical plane. Modern quackery was scarcely known, and even to-day it may be said that there are fewer irregular practitioners in the Philippines than in almost any other country in the world.

The great cost of acquiring a medical education, and the long years of separation from home and friends, together with the manifestation of the spirit of professional development, led to the establishment, in 1871, of the San José Medical College, as the medical department of the Santo Tomás University, thus inaugurating a new period in the history of medical progress. The second period begins with the graduation of the first class from this college, in 1876, after a five years' course, and extends to 1898, when the American doctor appeared on the scene. It was during this period that such men as Pardo de Tavera, Rizal, Bautista, Apacible, Luna, Manuel Gomez and many others whose names are permanently associated with their country's history entered the profession. To be a doctor in those days meant opportunities for political advancement and prominence. From the medical profession came the Filipino political leaders, Filipino business men, Filipino generals and Filipino statesmen.

With the beginning of the present period, in 1898, a new order of things was established. The microscope supplanted the sword, the martial spirit gave place to the research habit, and the status of social and political prominence, to self-sacrificing obscurity, until to-day the medical man of the Philippine Islands, like the medical man the world over, is struggling on in the race of life, with no hope beyond that of being granted the sacred privilege of helping his fellow man.

The past year has been one of great importance in its relation to local medical progress. Until one begins to reflect along the lines suggested by the title of this address, he will have no idea that so much has been or could be accomplished in so short a time. The most notable event is the passage of an act by the Philippine Commission establishing a medical school and defining the manner in which it shall be controlled and conducted. The law provides that this school shall be located in Manila and known as the Philippine Medical School. It is to be managed by a board of control, which shall consist of the secretary of public instruction, the secretary of the interior, one other member of the commission, and one other member to be designated by the governor-general. The dean of the faculty, after its organization, shall also be a member.

The board of control has been vested with the authority to receive endowments and bequests, and to provide for their investment and disbursement, according to the conditions under which they were given; to confer the degree of doctor of medicine on such persons who are recommended by the faculty, and to perform in general all duties usually performed by boards of trustees.

The establishment of this school will mark a new era in the progress of medicine in the Philippine Islands. In time it will prove to be the best investment that the commission could have possibly made. The Philippines, with an educated native doctor for every thousand inhabitants, would be a different country with a different history.

* An address delivered at the third annual meeting of the Philippine Islands Medical Association, Manila, Feb. 28, 1906.

We do not need American, European or other foreign physicians, but educated Filipino sanitarians. The former president of this association, in his address at the last annual meeting, mentioned the fact that the Japanese government, at the beginning of the Russo-Japanese war, determined that the only hope in the war with Russia was that every man who died should die on the field of battle, and planned to offset the numerical superiority of two millions of Russians over half a million Japanese by superior sanitary provisions. The Japanese medical schools are responsible for this reform, and the Philippines may well profit by the lesson, even if considered from a standpoint of dollars and cents, but the value of human lives can not be estimated by this standard.

The Philippine Medical School will do for the Philippine Islands what the Japanese schools have done for Japan, and will prove a blessing to the people, and it should have the encouragement which its importance deserves.

It is not immodest to claim that this school has been made possible largely through the efforts of the committee on public policy and legislation of this association. The work was begun by the committee for last year, and followed to a successful conclusion by the present committee.

Since our last meeting the cause of medicine in the Philippines has been greatly advanced by the establishment in the city of Manila of the Saint Paul's Hospital. This institution was founded by the Archbishop of Manila; a large amount of credit, however, is due to some representative members of this association who agitated the question until the object was attained. This hospital, with its modern equipment and superior facilities, is a monument to American ambition and progressiveness and a blessing to the public.

During the year Bishop Brent, of the Episcopal Church, has completed the necessary arrangements for establishing a general hospital; the Methodists, through Dr. Stuntz, have opened a dispensary and will soon establish a maternity hospital. The Navy has completed a fine modern hospital at Canacao, without which it would have been very difficult for Manila to care for the wounded Russian sailors, the hospital, fortunately, being opened just a few days before they arrived. The Army also completed a modern hospital at Fort William McKinley. A large general hospital has been built in Ilioilo by the Presbyterians. The government maintains a sanitarium in the mountains of Benguet. Dispensaries are operated, either by church organizations or by the Bureau of Health, at Cebú, Dumaguete, Cervantes, Laoag, and at many other places throughout the provinces. In addition to these facilities, the Bureau of Health, during the year, sent about $10,000 worth of medicines to remote portions of the islands for the purpose of furnishing relief to the indigent poor. How different is this from the condition of affairs a few years ago, when the free dispensary conducted by the Board of Health in the district of Quiapo was the only institution of its kind in the Philippine Islands. Now we have dispensary service at seven health stations and a central dispensary at the headquarters of the Bureau of Health; the dispensary service—surgical, medical and dental—of Saint Paul's Hospital; the Saint Luke's Dispensary, the Methodist dispensary and also several dispensary services conducted by native physicians. But while it is true that the facilities just mentioned show great progress, it is also true that Manila is still far behind other cities of similar size, and a large hospital, with modern buildings and equipment, is urgently needed for the relief of the afflicted, and if the new Philippine Medical School is to start with any hope of success a hospital with teaching facilities, where practical medicine may be learned, is absolutely necessary; otherwise mere theorists will be the graduates.

A recent reorganization act has greatly enlarged the duties of the Bureau of Health by merging into it the Civil Hospital, the Benguet Sanitarium, and the medical service of the Bureau of Prisons.

In the case of communicable diseases great progress has also been made. The Culion Leper Colony will soon be ready to receive patients, thus eliminating one of the most pressing and vexatious questions with which we have had to deal. The San Lazaro Hospital, with its leper, insane, cholera, smallpox and plague departments, has added to its equipment and facilities and is better prepared than ever to meet any emergency that may arise.

A few years ago the medical profession looked to its representatives in India for its research work on all tropical diseases, but since the American occupation of these islands a great change has taken place. The names of our scientific men are frequently seen in American and European medical literature. The medical world maintains an attitude of constant expectancy toward the medical men in the Philippine Islands—an expectancy which has not yet been disappointed. During the year results have been achieved in the advancement of medicine which are not only of interest to the Philippines, but are matters which have aroused interest and comment from medical men in all parts of the world. Among the foremost may be mentioned the experiments which have been conducted in the leper department at the San Lazaro Hospital by Dr. Wilkinson in the treatment of leprosy with the *x*-ray. While this work has not been sufficiently extensive to justify a positive statement, yet it has been successful enough to offer a well-grounded hope that the medical profession can hold out some encouragement to sufferers from this loathsome disease, who have from remotest times been exiles from society and denied all earthly hope. The results achieved by Dr. Wilkinson have at least demonstrated that it is possible to cure some cases of leprosy.

Another noteworthy achievement is the improvement made by Dr. R. P. Strong in the preparation of cholera and plague vaccine. A paper, by Dr. Wherry, on "Glanders and Its Prevention" has been pronounced, in Europe, as the best that has appeared on this subject. The paper on "Tropical Light," by Major Woodruff, of the United States Army, which has attracted so much attention in the medical and lay press, was first read before the Manila Medical Society.

The American medical profession has been represented in these islands only about eight years, but they have been strenuous years, full of discouragements and disappointments, but the record as written is one in which every American physician can take pride. To those who have not had an opportunity to compare the results of sanitary efforts in the cholera epidemic of 1902 with the present epidemic, the results may not appear so real as to those of us who are brought into daily contact with those for whom we are working. Measures which provoked profound opposition in the former epidemic are accepted, and even asked for, now. The influence of the physician is here to stay, regardless of the fate of the flag. This influence means progress along every line—progress everywhere.

The purpose of this association, as set forth in its constitution, is to federate and bring into one compact organization the entire medical profession of the Philippine Islands with a view to the extension of medical knowledge and to the advancement of medical science; to the elevation of the standard of medical education and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and the guarding and fostering of their material interests; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine; so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

No organization was ever actuated by nobler motives or inspired by higher ideals. It only remains to live up to these principles. The people of the Philippine Islands need, more than they need anything, the extension of medical knowledge, and the advance among them of medical science.

The medical profession of the islands needs that elevation of standard, that aid promised by the enforcement of just medical laws, that promotion of friendly intercourse and that guarding and protecting of their material interests promised by our Constitution. The solution of the great problems of state medicine depends on the enlightenment and direction of public opinion to which we have pledged ourselves, and it is our sacred duty to become more capable, honorable and more useful to the public in the cure of disease and in the prolonging and adding comfort to life.

Well may the principles of ethics of the American Medical Association enjoin us to be mindful of the high character of our mission and of the responsibilities that the physician must incur in the discharge of his momentous duties. Well may the same principles declare that every physician should identify himself with the organized body of his profession, as represented in the community in which he resides, and strive to make his local organization an instrument for the cultivation of fellowship, for the exchange of professional experience, for the advance of medical knowledge, for the maintenance of ethical standards, and for the promotion of the welfare of the public.

The field is large, the work is great, the duty imperative; therefore, in order that we may fully meet our responsibilities, let us ignore our differences of opinion, let us forget personalities, and all work together for the success of the cause to which we have dedicated our energies, our ambition and our lives.

Tendency to Kidney Stones in Tuberculous Patients Under Forced Feeding.—Mousseaux writes to the *Archives Gén. de Méd.* for May 15 calling attention to the remarkable way in which forced feeding, especially with nitrogenous foods, is liable to modify the soil in the tuberculous and to induce a tendency to renal lithiasis. It is generally supposed that tuberculosis and lithiasis are antagonistic, but the forced feeding is able to modify conditions to such an extent as to put an end to this antagonism. He has had occasion to observe four cases of kidney stones in tuberculous patients under forced feeding. He has also noticed increased elimination of uric acid in the advanced cases, sometimes accompanied by lumbar pains, connected with the incomplete and defective elaboration of the food ingested. When the tuberculosis is arrested or retrogressing, the tendency to kidney stone formation becomes apparent. He believes that the organism is unable to assimilate more than a certain amount of nitrogenous food, and that all above this is sheer waste or worse.

Original Articles

TWO CASES OF GENERALIZED BLASTOMYCOSIS.

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In neither of the cases of disseminated blastomycosis here reported is the course of the disease completed. Both patients, however, have passed out of our hands and it is extremely doubtful whether either will come again under our observation. We, therefore, place the two cases on record now and principally because certain facts noted in connection with them appear to us to add something to our knowledge of the clinical course, especially in the earlier stages of this interesting disease. It is not necessary at this time to review in detail the facts observed in connection with the previously recorded cases. That is done satisfactorily in the recent reports by Bassoe,[1] by Eisendrath and Ormsby,[2] and, so far as the closely related "coccidioidal granuloma" in California is concerned, by Ophüls.[3]

REPORT OF CASE 1.

Summary.—Man, aged 28, farmer in northeastern Iowa, was taken with acute fever in November, 1904, lasting one week. At the end of the second week numerous spots and lumps had formed on the face, head, neck, hands, forearms, lower extremities and back. Some of these lesions subsided, others grew into larger and smaller ulcers and abscesses, most of which refused to heal. There was some loss in weight. On admission to hospital, Jan. 10, 1906, 60 lesions of the skin and subcutaneous tissue were recognized, most of them being superficial ulcers and scars. Blastomycetes were present in pure culture in contents of abscesses and in sections of the ulcers. Some pulmonary signs, but no blastomycetes or tubercle bacilli were demonstrable in the sputum. There was considerable general and marked local improvement. He left the hospital April 6, 1906.

Patient.—R. K. U., born near Decorah, Iowa, twenty-eight years ago, entered La Crosse Lutheran Hospital Jan. 10, 1906.

Previous History.—His father's mother and one brother died of consumption after preceding pleurisy. As a child he had measles; otherwise he was healthy. For the last five years he has been a milk peddler, besides helping on the farm.

Present Illness.—In November, 1904, he was taken suddenly ill with headache, chills, pain in back and limbs, "as if he had taken cold." He felt feverish for a week, but did not stay in bed. At the end of the second week he observed that red spots or lumps from 1 to 2 cm. in diameter had broken out on the face, on the head and neck, hands and forearms, on the lower extremities and a few on the back of his body. The six or seven eruptions on the scalp reached in a few days the size of large hazel nuts, then broke, discharged considerable matter, dried up and healed in about two weeks.

The other spots or lumps started to grow with different rapidity, some quite early, others being apparently stationary for from five to six months. In a month some reached a diameter of from 2 to 4 cm., with an elevation of say 2 mm. over the surrounding skin; then they commenced to form crusts and disappeared gradually, leaving a more or less brown depression in the skin. Others formed elevations of reddish-blue color; matter would discharge itself through many pinhole openings, ultimately leaving a red granular, easily bleeding and very tender ulcer. Several of the smaller ones of this suppurating kind healed also in about three or four months, leaving the same atrophic skin as landmark.

1. Jour. Infect. Dis., 1906, iii, p. 91.
2. Jour. A. M. A., 1905, xlv, p. 1045.
3. Ibid., p. 1291.

The healing began always in the center. The larger ones reached a size of from 4 to 7 cm., and showed no tendency to permanent improvement.

Course of the Disease.—In June, 1905, after he had participated in the spring work on the farm, some of the spots on both legs and on the right foot, which had been nearly stationary since the primary eruption in 1904, began to grow rapidly and soon made it difficult for him to move about. Several abscesses formed; the first ones, in both submaxillary regions, were opened in July, one the "size of a fist" in the left supraclavicular region in October, two smaller ones on the flexor side of the left wrist and one as large as an egg over the right ulna a little below the olecranon in November, 1905.

In October and November, 1905, there was great improvement. All ulcers, especially on the lower extremities, diminished rapidly, secretion ceased, the surface flattened, glistening scales seemed to substitute granulations, tenderness disappeared, and he again moved about very freely, "perhaps too much."

In December, 1905, he became worse, all the apparently

Fig. 1.—Showing lesions in skin over lower extremities in Case 1.

healing ulcers breaking up almost simultaneously, and he was again forced to stay in bed most of the time. In the face, where the eruptions were very numerous, the growth was slow and the granulations not so luxurious; only a few smaller ones suppurated, leaving scars on the chin and cheeks.

The patient claims that no new spots have formed since the first eruption in November, 1904, and that consequently all infiltrations or ulcerations have developed from pre-existing lesions.

With the exception of pain, especially on the changing of bandages, and the necessity of staying in bed, his general condition has been fair. Appetite has been good as a rule, but still he has decreased in weight from 174 to 145 pounds. He had no chills nor night sweats, but some cough with slimy expectoration the last three weeks. The patient knows of no similar case in his neighborhood.

Present Condition.—There are 52 superficial skin lesions, including 16 scars and 8 deeper processes, either cutaneous infiltrations or subfascial abscesses, only one of which has healed. Of the eruptions on the scalp no trace is to be seen, as growth of hair is even all over. In the face eleven eruptions can be recognized, three of which have healed, leaving rather deep but not wide depressions. Except some smaller ones on tip and wing of nose, the larger areas seem to be healing; their margins are still, however, elevated, bluish in color, partly covered with a smeary crust, on removal of which small bleeding points are seen. The margins slant toward the center, which is covered more or less with whitish scales, the color being more like that of normal skin. The eruption on the glabella, adjoining eyebrows and nose makes the man look older than he is and gives at first sight an appearance not unlike a leper. An ulcer on the right temple has everted the external angle of the eyelids. One area covers the left half of the upper lip, left angle of the mouth and extends into the left nostril. On the back of the neck are two smaller, suppurating lesions and one scar.

On his back are three ulcers from 1 to 3 cm. in size, slightly elevated, covered with white scales; of these he is not aware. In the lumbar region are scars after two small ulcers, which did not annoy him any.

Fig. 2.—Lesions in skin of lower extremities in Case 1.

In the right submaxillary region is a small red scar from an opened abscess. In the left submaxillary region is an area of red infiltrated, undermined skin, where pus can be pressed out through several openings. In the left supraclavicular region is a fistulous opening, through which pus discharges freely.

On the dorsum of both hands are several large ulcerating surfaces, elevated about 5 mm. above the surrounding healthy skin. They consist of papillomatous granulations within an infiltrated, bluish-red wall, about 1 cm. wide, and partly covered with brownish, tallow-like crusts. On one finger are two slightly elevated areas with white dry scales.

On the volar aspect of the left wrist are two separate infiltrations in the skin with fistulous openings.

On the extensor side of the right arm below the elbow joint, is a small, deep, granulating ulcer, leading into a cavity under the fascia for about 4 cm.; no denuded bone is found. On the extensor side of the left arm, a little above the wrist, is a fluctuating tumor, approximately 6 cm. in diameter, over which the skin is freely movable and of normal color.

On the right thigh are seen four brownish scars or depressions from 2 to 4 cm. in diameter. On the right leg is one scar and two ulcers from 4 to 5 cm. in size. On the dorsum of the right foot are two areas, one 5x3 cm. and one 6x7 cm.; above the right heel is one 2.5x7 cm. In the left inguinal region is a subcutaneous abscess with a red, infiltrated, fistulous covering. On the left thigh are three scars and two suppurating ulcerations, on the left leg six scars and four ulcerations. (Figs. 1 and 2.) All lesions on the lower extremities look more active, the secretion is more profuse, and the odor very offensive. They are also extremely painful to the touch.

Over both lungs a few bronchial rales are heard and over a small area over the fourth rib in the papillary line there is fine creptitation. No blastomycetes or tubercle bacilli were found in the sputum. There are no enlarged lymph glands and the urine is normal.

Demonstration of Blastomycetes and Microscopic Examination.—There was no difficulty in recognizing blastomycetes in the form of characteristic, large double-contoured, occasionally budding bodies, in the unstained smears of the pus diluted with salt solution. No forms showing endogenous sporulation were seen.

Fig. 3.—Scars in skin of lower extremities after ulcers have healed in Case 1.

Rather liberal quantities of pus from unbroken abscesses, secured as carefully as possible to prevent contamination, were smeared on numerous agar slants (plain, glycerin, glucose), and after several days' incubation about 40 per cent. of the tubes showed pure growths of blastomycetes, the rest of the tubes being sterile. The number of colonies in the different tubes varied greatly, some tubes giving only one or two colonies, others a dozen or more. The colonies began as small, delicate, raised points that slowly grew into wrinkled masses, which eventually sent offshoots into the air and down into the depths of the medium. The organism belongs to the hyphomycetoid subgroup of Ricketts,[4] and its cultural characteristics are being studied further.

4. "Oidiomycosis (Blastomycosis) of the Skin and Its Fungi." Jour. Med. Research, 1902, vol. vi, p. 374.

In sections of abscess walls and of cutaneous ulcers, blastomycetes were found quite easily, generally free, surrounded by leucocytes, sometimes within giant cells. The ulcers present the structure characteristic of blastomycetic dermatitis—marked epithelial hyperplasia, inflammatory infiltration with giant cells here and there, and miliary abscesses. Tubercle bacilli or typical tubercles were not found.

Treatment and Further Course of Disease.—At first the treatment consisted in administration of potassium iodid, beginning with 4 grams and increasing the dose to 8 grams a day, besides local applications of different antiseptic solutions; boric acid, copper sulphate, silver nitrate and corrosive sublimate.

After several weeks' hesitation and refusal, he was persuaded to have the ulcers and abscesses curetted, which was done Feb. 14, 1906. The whole granulating surface of every surface was removed in one mass, leaving a perfectly smooth, freely bleeding, not very deep defect in the skin; no further curetting was necessary except of the margins.

After a while there commenced to form in the ulcers new granulation tissue, epidermization took place from the edges and eventually complete healing resulted, the healed areas being dark red in color, covered with scales, and (in distinction to the spontaneously healed foci), their center was more elevated than their margins. (Figs. 3 and 4.)

Fig. 4.—Scars in skin of lower extremities in Case 1 after ulcers had healed.

The deeper abscesses were curetted and counter-drained, but they have shown less tendency to heal, although secretion has diminished in all of them, especially during the last four weeks.

From March 16 to April 6 four injections were given of blastomycetic vaccine prepared by Dr. Ricketts from cultures of the organisms isolated from the patient, but of course no conclusions can be drawn as to the effect of the vaccine. The first injection was succeeded by a rise in the leucocyte count of 4,600, but the succeeding injections had no definitely recognizable immediate effect either on the leucocytes or on the temperature, which always fluctuated between 98 and 101.

The patient left the hospital April 6, 1906. Most of the lesions had healed and he could walk without inconvenience.

REPORT OF CASE 2.

Summary.—Norwegian, aged 58, farmer in Wisconsin for many years, became acutely ill Jan. 23, 1905, and three weeks later a large abscess had formed in the left lumbo-dorsal region.

Somewhat later, a similar attack occured, and before long a swelling appeared in the left forearm and on the thighs and right forearm eruptions that formed raised granulating areas that would heal partially and break open again. In October, 1905, an abscess formed in the right arm and more recently in the left arm. Blastomycetes were found in the pus and tissues of the ulcers. Excision and curettement of lesions was performed, in addition to general treatment. There were cough and expectoration—tubercle bacilli, but no blastomycetes were found in the sputum.

Patient.—C. O. Q. entered La Crosse Lutheran Hospital Feb. 21, 1906.

Previous History.—He was born in Norway fifty-eight years ago and has been in America thirty-eight years; for the past twenty-seven years he has been farming in Wisconsin. There is much tuberculosis in his family. He has been a dipsomaniac for many years, but has always been healthy.

Present Illness.—Jan. 25, 1905, he was suddenly taken ill

Fig. 5.—Ulcer on right thigh in Case 2.

with chills, headache, pain in the left chest and general malaise. There developed a large swelling in the left lumbo-dorsal region, and three weeks after onset an abscess surrounding eleventh and twelfth ribs and extending into the paranephritic tissue was opened and the eleventh and twelfth ribs were resected. Three weeks later, when recovering from the operation, he claims to have had another attack of chills and general debility. Soon after he detected a swelling under the skin in the middle of the left forearm on the extensor side. This has varied a little in size, has never been larger than an almond and never painful.

In the middle of May an eruption "like a ringworm" appeared on the outside of the middle of the right thigh. A little later he noticed a similar affection on the extensor side of the right forearm and one over the left trochanter. These eruptions began as red spots, 2 cm. in diameter, and increased gradually in size, became elevated over the surrounding skin, assumed a granular surface, and a crust of peculiar offensive odor formed. The eruption on the left hip ceased to grow, when it—in about two months— had reached its present size of 3x4 cm. and has always been covered more or less with dry crust. The eruptions on the right arm and thigh grew more rapidly, became more elevated, the granulations larger and more tender, the discharge more abundant and the surrounding wall higher. Several times during the autumn it appeared as if these two large ulcers would heal as the granulations would disappear, first in the middle, and in a short time the whole surface would become covered with red smooth skin, almost to the margins, which, however, were still elevated and not participating in the healing process. In a few days the ulcers would break out again and the same high granulations with the same offensive secretion would form. The patient used boric acid compresses and no internal medication.

Course of Disease.—During October, 1905, the right arm above the elbow began to swell and be painful. For over two months he suffered very much and lost in flesh. The mobility of the elbow joint decreased somewhat during that time. In the first part of January, 1906, this swelling was incised and a large amount of pus evacuated with instant relief. The opening has been discharging ever since, but there is pain only on attempting to straighten the arm.

Lately he has observed two swellings on the left forearm, the smaller one near the elbow in front, the other 6 cm. above the elbow on the back of the arm; both are a little painful to pressure.

Since May, 1905, when he recovered from the operation, he has been in fairly good health, and although he has not been able to work, he has not regarded himself as sick except for the inconvenience of the ulcerations and the pain during November and December, 1905, before the abscess on the right arm was opened. He claims that he has gained some lately. He has not been aware of any fever of late. Appetite has been good and the natural functions in order. Lately he has been coughing considerably.

Present Condition.—The patient looks old, with sunken cheeks, grayish color of skin, pale lips and conjunctivæ. Height 5 feet 6 inches, weight 110 lbs.

In the left lumbo-dorsal region is a scar 12 cm. long; the twelfth rib and the greater part of the eleventh are missing, and whenever he speaks or coughs the integument bulges out.

The swelling on the left arm (which is the second lesion in order of appearance) is about 4 cm. long, 2 cm. wide and 1 cm. high; the skin over it is of normal color and freely movable; the mass seems to be attached to the deeper layer of muscles, is slightly fluctuating, and somewhat painful to pressure.

On the same arm are the two swellings, which recently made their appearance, the one right above the elbow has the size of an almond, the other, as large as a hen's egg, is situated 6 cm. above the elbow; it seems to be attached to the triceps, with which it moves. This last one has grown very rapidly in size. Both are soft, fluctuating.

The first "ringworm-like" eruption on the right thigh has now developed to an ulcer 10 cm. long and 5 cm. wide. (Fig. 5.) It is surrounded by an infiltration that forms a wall or margin about 1 cm. wide and 7 mm. high, a little undulated, of bluish-red color, partly covered with light brown sebum-like crust, on removal of which fine openings are seen. This wall or margin surrounds an uneven granulomatous or papillomatous surface. The granulations bleed easily and are very tender to the touch. Some of them form slender papillæ.

The eruption on the left hip, which the patient claims has been stationary for at least seven months, is only slightly elevated over the surrounding skin, and covered with a brown crust; the whole area has a more warty appearance.

The lesion on the right forearm is the largest, being 13 cm. long and 7 cm. wide. (Fig. 6.) It differs from the eruption on the right thigh in that a healing process has commenced in its central part, where the granulations are substituted by thin skin, which looks quite healthy, when the crust is removed.

On the same arm is an abscess, opening 5 cm. above the external condyle. The whole lower extremity of the humerus is very thickened. Above the internal condyle is a soft fluctuating swelling, covered with red infiltrated skin, but it does not communicate with the former opening.

No enlarged lymphatic glands are to be found anywhere.

There are bronchial rāles over both lungs. No tubercle bacilli or blastomycetes were found in the sputum on entrance. The urine contains no albumin nor sugar.

Demonstration of Blastomycetes and Microscopic Examination.—Blastomycetes were found in the unstained smears of the pus from an unopened abscess. No other micro-organisms were found in stained preparations. Smears of the pus on agar slants gave pure cultures in about one-half the tubes. This organism also proved to belong to the hyphomycetoid group of Ricketts. Blastomycetes were demonstrated also in the sections of the extirpated ulcers and in the walls of abscesses. The ulcers were typically blastomycetic in structure. Typical tubercles with caseation were not observed.

Treatment and Further Course of Disease.—The deeper abscesses were either curetted or excised. The area over the left hip was excised. In these instances healing resulted. The lesion on the right thigh was excised and grafted, but only some of the grafts took and the wound healed by granulation tissue. The area on the right arm was curetted, leaving an island of healthy looking skin in the center. Four days later this area was studded with yellow points as large as pin heads; one per cent. solution of copper sulphate was applied in the form of compresses and healthy granulations soon sprang up and healing has since progressed from the margins. During his stay in the hospital he was given potassium iodid up to six grams daily. He also received four injections of blastomycetic vaccine prepared from organisms cultivated from his own lesions, but whether it had any influence on the rapid healing of the local lesions can not be stated.

During the last two weeks or so of his hospital sojourn the

Fig. 6.—Ulcer on right forearm in Case 2.

cough and expectoration increased and eventually tubercle bacilli were found in the sputum, but no blastomycetes.

The temperature ran from 98 in the morning to 100 and 101 in the evening. He left the hospital April 6, 1906.

REMARKS.

1. *Mode of Invasion.*—In these two cases the dissemination of the blastomycetic infection appears to have taken place quite suddenly and without the presence of any chronic, external lesion that might be regarded as the primary localization. In Case 1 the onset is like that of an acute general infectious disease, numerous separate lesions developing simultaneously in the skin and subcutaneous tissue directly on the heels of a general febrile reaction. In Case 2 the onset is also definite, but here the localization of the infection seems to have taken place in the deeper tissues before the subcutaneous invasion. Of course, the question whether or not the pararenal abscess, which formed soon after the first general reaction, really was of blastomycetic nature probably never can be decided, because the pus was not examined. At all events, other foci had formed already, or did form soon after, of the blastomycetic nature of which there can be no question.

The actual portal of entry of the infecting organism in these cases is, of course, largely a matter of conjecture. In Case 1 the history points to the lungs. In most of the previously reported instances of systemic blastomycosis the lungs are regarded as the point of primary attack. The hypothesis that blastomycosis may result from aërial infection might well form the basis for experiments to determine (a) whether the organisms in question are conveyed easily in air currents when dry, (b) whether they retain their vitality and infectiousness after drying, and (c) whether they are carried in minute droplets of sputum in which we know they may occur in pulmonary blastomycosis (Eisendrath and Ormsby, Bassoe). In this way some knowledge might be obtained as to the danger of established cases of blastomycosis as sources of further infection.

In the majority of instances of systemic blastomycosis (and coccidioidal granuloma) the involvement of the integument has been marked. The organisms seem to have a special predilection for the skin which may be an important avenue for escape perhaps to new hosts. As yet we know nothing of the occurrence of pathogenic blastomycetes or oidiomycetes in nature and consequently we do not know whether the cases of blastomycosis that are being recognized with increasing frequency, particularly in this part of the world, are the result of infection with facultative parasites or facultative saphrophytes, but so far as the mechanisms for continued parasitic existence are concerned the organisms of blastomycosis would appear to have reached a high degree of parasitic adaptation.

The frequent development of typical blastomycetic ulcers (dermatitis) in the course of generalized blastomycosis suggests that even more or less isolated, cutaneous, blastomycetic lesions may develop as the result of infection by way of the blood current and not necessarily always, as seems quite natural, from direct implantation from without. This possibility should, we believe, receive particular attention in those cases in which the lesion is located on parts of the body, e. g., the back, not ordinarily exposed to external infection. The fact that blastomycotic foci sometimes undergo spontaneous healing (illustrated especially well in our Case 1) may make it difficult to trace the sequence of events in a given case.

Treatment.—As yet no effective treatment for systemic blastomycosis has been discovered. Judging from the literature the problems of the nature of the finer reactions to blastomycotic infection and the formation of specific antibodies have received but little attention. The character of the lesions of blastomycosis—the accumulation of leucocytes, the formation of giant cells, and the phagocytosis of blastomycetes—indicates that this is an infection in which phagocytosis is an important means of defense and of healing. Certain preliminary test-tube experiments showed that phagocytosis of blastomycetes is favored by the presence of normal serum, and the idea arose that it might be possible to stimulate the greater formation, in cases of blastomycosis, of the body that promotes phagocytosis (opsonin), as well as of other antibodies, by the injection of blastomycetic substances in readily absorbable form. It was thought that the resistant character of the micro-organisms coupled with their enclosure in cellular exudate and granulation tissue possibly prevents the absorption in proper quantities of the substances necessary to call forth strong immunizing reactions. Hence, in order to hasten, if possible, the reactions that favor healing, we injected in each of our cases a sterile blastomycetic vaccine prepared by Dr. H. T. Ricketts of the correspond-

ing organism. This procedure is based directly on the principles underlying A. E. Wright's method for the treatment of infections by vaccines composed of corresponding bacteria. Unfortunately the patients left the hospital at a time when no conclusion of value could be drawn as to the results of the vaccine. Work is at present in progress to develop certain methods whereby the effect of the blastomycotic vaccines may be estimated *in vitro*, in the hope that it may be possible to furnish some guidance to the treatment.

THE CLINICAL SIGNIFICANCE OF VARIATIONS OF WRIST AND ANKLE.*

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The paper which I have the honor to present to the Association contains little that is new to professional anatomists, but the underlying facts have not yet been brought, through the text books, to the cognizance of practical surgeons. The purpose is to call attention to matters of clinical importance, ignoring so far as may be, all abstract science. It were superfluous to show that variations are very numerous. I wish to insist on the practical point that they are to be expected at certain definite places. These variations are of four classes. The first is due to an increase in the number of bones, owing to the persistence of elements which normally fuse or disappear; the second, to a diminution of bones, owing to the union of elements usually distinct; the third, to unusual relations between bones; and the fourth to the exceptional development of processes usually small or absent. The important point is that the appearance of a variation from any of these causes is not to be confounded with the result of a pathologic process. I shall make no attempt to cover the whole field, nor even to show all that I have observed; but every figure that I shall show, with one exception, is from an observation of my own.

FIRST CLASS OF VARIATIONS.

To understand the first class we must know that the ground plan of the wrist and ankle is not that of the adult. Many pieces originally distinct, have either utterly disappeared during development or become fused with others. In saying originally distinct, I do not refer to any mythical theory of descent, but to what has actually occurred in that particular man. It has been shown that the early cartilage of the wrist or ankle is a single layer, not subdivided by joints, in which the place of the future bones is designated by well-marked accumulations of cells, some of which may soon lose their identity, while others, though ultimately fusing or disappearing, may be for a time as important as the groups of the typical bones which persist. Exceptionally, permanent bones develop from these usually transitory centers and also some of the so-called normal bones are occasionally represented by their constituent parts, which have refused to coalesce. Such additional bones are of great practical importance, owing to the natural tendency, especially after a lesion, to attribute them to fracture.

Bones of the Wrist.—The *styloid* bone of the wrist affords a typical illustration of what occurs. (Fig. 1). Originally a distinct piece of cartilage, it joins the base of the third metacarpal, forming the styloid process, which projects sharply between the trapezoid and the os magnum; but instead of pursuing this course it may preserve its individuality, or it may fuse with either of the other adjacent bones, thereby modifying strikingly the lines of the joints. (Fig. 2.)

Fig. 1.—Styloid free.

The late Professor Pfitzner was so sure that the swelling on the palmar aspect of the os magnum represents a distinct element that he named it the *subcapitatum* (Fig. 3), though it had never been seen isolated. After his death I found it separate in both hands of one body. The observation remains unique.

The variation of supreme interest in the wrist is the

Fig. 2.—Styloid fused with os magnum.

subdivided scaphoid. This bone is developed from two chief elements, the radial and the ulnar, which normally fuse in the early cartilaginous stage. The former of these, bearing the trapezium and trapezoid, is situated in the main distally from the latter which forms the greater part of the joint with the radius. Exception-

* Read in the Section on Surgery and Anatomy of the American Medical Association, at the Fifty-seventh Annual Session, June, 1906.

ally these parts never fuse. There is very rarely, if ever, in these cases a true joint between the bones, but usually a remnant of the original cartilage, more or less degenerated into fibrous tissue. That a bone so constituted should yield to violence more easily than a normal one, and that the displaced surfaces with their fibrocartilaginous covering should be ill-adapted for repair is precisely in accord with clinical experience in so-called fracture of the scaphoid. While I should not presume to assert that a normal scaphoid may not be broken, I have no doubt that the great majority of the so-called fractures of the scaphoid are due to the separation of the two original parts.

Fig. 3.—Subcapitatum.

In my collection I have a scaphoid at birth, and consequently wholly cartilaginous, divided into its two typical halves, which does not present the slightest sign of any pathologic process. I have also a scaphoid of a man of sixty-one, which remained throughout life in two pieces firmly united by fibrocartilage, presenting no evidence of lesion.

Fig. 4.—Ulnare externum.

It must be admitted that many cases, perhaps most, of subdivided scaphoid, have a very pathologic appearance. This is probably the consequence of inflammation following an early lesion. I must, with regret, leave subdivided scaphoid which I propose to discuss elsewhere.

The semilunar is composed of a body and of two points which may appear as separate bones forming each horn of the crescent, one on the back of the wrist and one in the palm. The former is the more common. The bone is sometimes found, as in this instance, divided into two equal parts. The interpretation is, I admit, difficult, but I incline to explain it by the over-development and separation of the dorsal point, the *epilunatum*.

The *ulnare externum* (Fig. 4), situated on the dorsal surface of the cuneiform near the unciform at the edge of the wrist, is sometimes found distinct, and when shown by the *x*-ray might, perhaps, be mistaken for a fracture. I am not aware that it has ever been caught in a skiagraph.

Fig. 5.—Os trigonum.

The *hamular* process of the unciform bone is a true element which exceptionally remains distinct.

Bones of the Foot and Ankle.—The foot presents corresponding variations, several of which, however, are less accessible to the *x*-ray than those of the hand. One of the most common is the *os trigonum* (Fig. 5), an element normally forming a part of the external tubercle at the back of the astragalus, which, when distinct, is connected to the bone by fibrocartilage, or very rarely by a true joint. Sometimes it appears at the end of a long process. It may be double. It is instructive to note that a distinguished surgeon, who is also an excellent anatomist, when he first met with this element, attributed it to fracture.

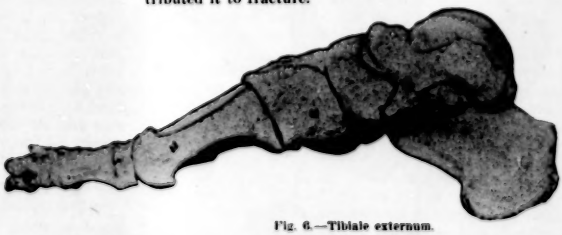

Fig. 6.—Tibiale externum.

The *tibiale externum* (Fig. 6), often appearing as a sesamoid bone, may be fused with the tuberosity of the scaphoid. It may form a hook-like process, suggesting an exostosis, or it may be distinct, joined by fibrocartilage. Sometimes when separate it is a striking feature of the foot between the tuberosity and the sustentaculum tali.

The *os intermetatarseum* (Fig. 7) is an element which normally either disappears or fuses with the internal cuneiform, but may exceptionally appear as

a process of the latter, or as a distinct element, or attached to either the first or second metatarsal (Fig. 8). My collection contains all four forms.

On account of its extreme rarity and of the doubt whether the *x*-ray would define it, the *os intercuneiforme* which I alone have observed, is probably of little practical importance.

Fig. 7.—Os intermetatarsum, free.

Fig. 8.—Os intermetatarsum fused with second metatarsal.

The *secondary cuboid*, usually fused with the scaphoid, may make a great projection in the sole of the foot. It has but once been seen distinct. It may have been so at an earlier time in this specimen.

Yet an element should not be disregarded because it

Fig. 9.—Fusion of semilunar and cuneiform in a black man of twenty-three.

is extremely rare. Grashey's "Atlas of X-Rays" shows a foot with a separate tuberosity of the fifth metatarsal, which is one of the greatest rarities. Pfitzner never saw it. I have one probable specimen in an infant's foot.

SECOND CLASS OF VARIATIONS.

Passing now from cases of too many bones to those of too few, which constitute our second class of variations, it is especially to be noted that such conditions are due to the non-appearance of a joint cavity in the originally continuous cartilage and that the specimens do not show the slightest pathologic change. It is further noteworthy that these unions occur between particular bones and also at definite places. I have three or four specimens of fusion of the semilunar and cuneiform (Fig. 9), all of which are essentially the same, and similar to those figured by Pfitzner. The proximal surface of the conjoined bone is continuous and perfectly smooth, while the distal surface presents a deep cleft. In a case described by Elliott the cleft is shallow. It is very interesting to note that this is to some degree a race characteristic, a large proportion of the cases occurring in negroes. The second metacarpal is occasionally fused with the trapezoid, but the specimens present a less normal appearance.

Though it occurs in the hand instead of the wrist and consequently beyond the limits of this paper, I want to show this case of congenital fusion of the proximal parts of the fourth and fifth metacarpals as an illustration of union which assuredly is not pathologic.

A favorite point of union between the tarsus and met-

Fig. 10.—Fibrocartilaginous union of os calcis and scaphoid.

atarsus is at the extreme plantar border of the external cuneiform and the third metatarsal. It is probably due to the transformation of the original cartilage into bone instead of ligament. Pfitzner has seen it in a girl of seventeen, the union being partly cartilaginous and partly bony, and I in one of nineteen, the union being bony, in feet which were otherwise absolutely free from any abnormality and which did not show the slightest trace of inflammation. I shall not spend time in discussing another explanation.[1] The fact of the relative frequency of fusion between these two particular bones is to us the important one.

THIRD CLASS OF VARIATIONS.

The third class of variations comprises cases of unusual relations of bones. Usually the front of the astragalus and os calcis come to the same transverse line. Exceptionally, the front of the os calcis reaching further forward, joins the outer end of the scaphoid (Fig. 10). They may be in apposition merely by a line's breadth, or for the greater part of an inch. They may meet with a true joint intervening, or be closely connected by fibrocartilage, so that practically

1. Pfitzner inclined to account for fusions by the occurrence of a supernumerary element which fused at an early stage with its neighbors. There is support for this view in some cases, but I think not in all.

there could be no motion between them. The bony tissue may even be continuous, but I have not myself observed this condition. Lebouceq believes that fusion of these bones leads to a break-down of the plantar arch. In my cases of fibrocartilaginous union I have found some support for this view, but on the whole I am inclined to associate this connection with a high instep. Apart from its influence on the shape of the foot this peculiarity is interesting from the opposition it would offer to a Chopart's amputation.

FOURTH CLASS OF CASES.

Finally, in the fourth class, we have the over-development of a process usually small and occasionally absent. My instances are all from the foot. Here is an enor-

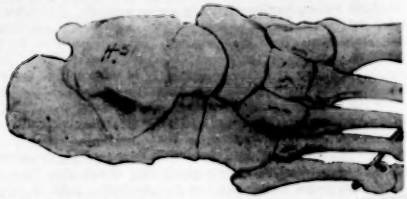

Fig. 11.—Very large inner posterior tubercle of astragalus.

mous peroneal process separating the tendons of the peroneus longus and brevis. This specimen from a negro almost equals the development of the chimpanzee, which alone of anthropoid apes has this process very prominent. It may be pointed out in passing as a good illustration of the folly of attempting to explain such appearances by atavism.

Here is the inner posterior tubercle of the astragalus (Fig. 11) which, though apparently not a separate element in the plan of the foot, is sometimes overgrown so as to surpass the normal external one. It is a good instance of a trochlear or pulley-like process described by

Fig. 12.—Abnormal process above the head of the astragalus.

Hyrtl, round which a tendon curves. Perhaps of the same class, but of more doubtful interpretation, is the rising on the front of the astragalus (Fig. 12). Be it what it may it is very uncommon. A similar process, probably still more rarely, is found directly in front of it on the scaphoid.

The practical surgeon who may not care for the morphologic insignificance of these variations, may be interested to know that they occur at certain definite points and are, therefore, to be reckoned with. At least, it is in this hope that I have presented the paper. I am far from asserting, however, that these variations may not be accompanied by pathologic conditions, making the interpretation difficult.

DISCUSSION.

Dr. F. J. Shepherd, Montreal, Canada, agreed with Dr. Dwight that many of these cases can be explained on the basis of morphology and comparative anatomy. Any one who is well posted on these subjects can put forward a good explanation for the occurrence of these anomalies. Dr. Shepherd was the man Dr. Dwight referred to who read a paper about twenty years ago on fracture of the astragalus, but at that time he did not know that these cases had been described as due to an ununited epiphysis. Dr. Shepherd still holds, however, that very often the separation of the fragment of the posterior portion of the astragulus is caused by trauma, a separation of an epiphysis. The best example is the so-called fracture of the anterior portion of the acromion process which was long considered a fracture. We now know that it is an ununited epiphysis.

THE DIPLOBACILLUS OF MORAX-AXENFELD.*

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The Morax-Axenfeld diplobacillus as a pathogenic agent infecting the cornea and conjunctiva is an organism of the highest importance to the ophthalmologist. In America, in all probability, this organism is very widespread geographically and a frequent cause of infection, but it has not been deservedly recognized. Its recognition is of the greatest importance, because against infection with it we have a specific remedy. Owing to these facts, it has been thought wise to emphasize this organism in this symposium.

In justification of the statements made in the foregoing paragraph, it may be well immediately to call attention to the fact that in the 10 cases recorded below (and this experience accords with those of other observers) clinical conditions were caused by this organism varying from the most serious ulcer of the cornea to the most trivial conjunctivitis; indeed, the organism was found in one case in which there were neither objective nor subjective symptoms. There can be no question of the importance of such an organism to the ophthalmologist. That it is widespread geographically in this country is shown by my recent experience, for I have studied bacteriologically a case which Dr. N. M. Black found in his practice in Milwaukee, and of my cases one came from the southern part of Illinois. The fact that ten cases of infection by the Morax-Axenfeld bacillus were found in six months in a small clinical material is presumptive evidence that this bacillus is a frequent cause of infection in this country. That the organism has not received the attention in America that it deserves is evident from the scant literature that we have concerning it. This point has lately been emphasized by Gifford,[1] who in his article speaks of the fact that a most experienced American ophthalmo-bacteriologist had recently written to him that he had never seen a culture of this bacillus.

A recent statement by zur Nedden,[2] of Bonn, suggests to me that possibly this is an eminently fitting time to emphasize in America the importance of this organism in the pathology of the eye. This statement

* Read in the Section on Ophthalmology of the American Medical Association, at the Fifty-seventh Annual Session, June, 1906.

1. Gifford: The Clinical Importance of the Diplobacillus of Morax-Axenfeld. Ophthalmic Record, 1905, vol. xiv, p. 511.

2. Zur Nedden: Ueber einige seltene bacteriologische Befunde beim Ulcus serpens. Archiv. für Augenheilkunde, 1905, vol. lii, p. 143.

was called forth by Paul's[3] report from the Breslau clinic of a series of cases of serious corneal ulcers caused by the diplobacillus. Zur Nedden says that it is not to be doubted that the Morax-Axenfeld organism in some regions causes severe inflammations of the cornea, but that in Bonn he has not seen such complications as a direct result of infection with it. He suggests that possibly the sensitiveness of the cornea for this infective agent is not everywhere the same, and says that possibly this may be explained on the idea that this disease in the Western provinces of Germany has, as a result of its long existence and wide distribution, lost a part of its virulence. In this country the organism certainly finds much virgin soil, and if the suggestion of zur Nedden holds good we can expect the worst results from it. Four of the cases recorded below support zur Nedden's idea; one of these cases, as will be seen, was a severe corneal ulcer.

LESIONS AND TREATMENT.

During the last six months, as has been said, I have found this organism as the pathogenic factor in ten cases. These cases have shown beautifully the clinical possibilities of this organism and the results of proper treatment; in other words, they tell well the clinical story of the diplobacillus; hence they are introduced here. The disease most typical of infection by this germ is a chronic blepharo-conjunctivitis. In this series I have had six such cases and they are recorded first, the atypical cases following:

CASE 1.—Chronic blepharo-conjunctivitis in a young man who said that the condition was of long standing. The condition presented the picture most often found in infection with this organism. The edges of the lids were red and particularly at the outer angles, where the skin below the margin of the lids was also involved, being macerated by the overflowing of tears. There was more or less scaly deposit on the edges of the lids. The palpebral conjunctiva was not much swollen and only slightly hyperemic; the bulbar conjunctiva was not involved. There was slight discharge. The patient was a good deal annoyed by irritation of the lids. He said that other members of his family were similarly affected. The diplobacillus was demonstrated in culture and smears. Treatment with zinc sulphate 0.25 per cent., applied three times daily, and unguentum zinci oxidi applied to the lids at night brought about a rapid recovery.

CASE 2.—Chronic conjunctivitis in an elderly man who said that he had had the condition for a long while and had been under the care of a competent oculist without avail. He complained of burning and smarting of the lids and a good deal of discharge in the morning. The condition showed a chronic blepharo-conjunctivitis, with involvement of the edges and skin of the lids, particularly at the outer angle. Smears and cultures showed diplobacilli. Zinc sulphate, 0.25 per cent. solution, applied three times daily, cured him promptly.

CASE 3.—An elderly man on the service of Dr. Ralph Hamill at Dunning Asylum, to whom I am indebted for the privilege of recording the case. The man had a chronic conjunctivitis and smears showed Morax-Axenfeld bacilli.

CASE 4.—Chronic conjunctivitis in a business man, resident of Chicago, who complained of a slight discharge from his lids in the morning. There was very slight redness of the palpebral conjunctiva, but no involvement of the edges of the lids. As will be explained below, in spite of attempts to make a bacteriologic diagnosis, the presence of diplobacillus was not at first recognized and the patient was treated for two weeks with 5 per cent. solution of protargol, applied twice daily. This did no good and at the end of that time the medicine was changed to 10 per cent. argyrol, applied three times daily, which also did no good. In the meanwhile the patient had been given glasses to correct a slight refractive error. The glasses were of no service. At the first examination the presence of diplobacilli was suspected and three or four smears at different times were examined, but no diplobacilli found. Cultures were also made on Loeffler's blood serum on which Xerosis bacilli grew, but no diplobacilli. The Loeffler's blood serum that I had used was finally found to contain boric acid. On good blood serum the diplobacilli grew immediately and abundantly. The patient was then given zinc solution and in two weeks he was relieved of all eye symptoms.

CASE 5.—A small boy with blepharo-conjunctivitis, and who has recently had repeated phlyctenule-like ulcers at the edge of the cornea and one small ulcer in the center of the cornea. Bacteriologic examination showed diplobacilli and staphylococcus aureus; smears from the conjunctival sac show the latter organisms in great abundance. Treatment with zinc sulphate, 0.25 per cent., applied three times daily, brought about a rapid recovery.

CASE 6.—Acute conjunctivitis in a man aged 37. The patient stated that the conjunctivitis began two days before consulting me. On examination the palpebral conjunctiva was found acutely inflamed and there was abundant muco-purulent discharge. The patient complained greatly of burning and smarting of the conjunctivæ. He said that the lids were stuck together in the morning. Smears and cultures showed the Morax-Axenfeld diplobacillus. In this case pure cultures of the diplobacilli were found.

CASE 7.—Acute conjunctivitis in a woman, aged 40. This case was the counterpart of the foregoing one, except that Xerosis bacilli were found along with the diplobacillus. Both of these cases recovered promptly under the effect of 0.25 per cent. zinc sulphate, applied three times daily.

CASE 8.—Acute conjunctivitis was seen at the Cook County Hospital at the request of Dr. Joseph A. Capps, on whose service tne patient was entered, and to whom I am indebted for the privilege of recording the case here. The case was thought to be one of gonorrheal conjunctivitis. There was a rather profuse muco-purulent discharge and the palpebral conjunctiva was quite red and slightly swollen; the ocular conjunctiva was not involved. In smears there were great masses of diplobacilli—no other organisms were present.

CASE 9.—Corneal ulcer. The patient, a man 35 years of age, and a native of Kentucky, stated that from unknown cause his eye became sore and began to discharge several days before Thanksgiving day. He neglected it for several days and then applied to a public clinic for care, where they bandage the eye, put in atropin, and told him that the eye was in a serious condition. On Sunday following Thanksgiving day he was admitted to my service at the Cook County Hospital. There was a bad ulcer of the cornea which involved about 1/3 of its area and extended from below over the papillary region. The ulcer, which extended deeply into the corneal tissue, showed a yellowish necrotic mass with a slightly bulging center. The cornea at the edge of the ulcer was undermined and a semi-opaque zone extended around the top of the ulcer. The upper part of the cornea was clear and a clear zone separated the ulcer from the limbus below, except at the lower inner side. There was hypopyon and iritis, and the iris was adherent to the lens at places—the pupil was semi-dilated from atropin. There was great double engorgement and a slight muco-purulent discharge. There was no disease of the lachrymal sac. A diagnosis was made of ulcus serpens and the pneumococcus was considered as the probable cause. The ulcer was cleansed with sterile boric acid solution, cocain was applied, smears were made, and also cultures on human blood agar. The cultures developed pseudodiphtheria bacilli; the smears showed pseudodiphtheria and diplobacilli. The ulcer was cleansed, the eye was cocainized, and scrapings from the edge of the ulcer made and inoculated on blood serum. These cultures showed pure cultures of Morax-Axenfeld diplobacillus. Proper steps were taken to differentiate the organism from that of Petit. The usual treatment for corneal ulcers was instituted, with the addition of 0.25 per cent. solution of zinc sulphate, a few drops applied every three hours. The condition immediately began to improve and the patient was discharged with a fairly good eye.

3. Paul: Ueber Hornhautulcerationen durch Diplobacillen. Klin. Monatsb. für Augenhk., 1905, vol. xliii, 1 p. 154.

CASE 10.—In marked contrast to the case of ulcer is the following one: A young lady consulted me, complaining of headache, which was due to a refractive error. In examining her no symptoms referable to the conjunctivæ or lids excised, and to all appearances the conjunctivæ were normal, but smears and cultures showed the presence of Morax-Axenfeld diplobacilli and pseudodiphtheria bacilli.

As will have been seen from the foregoing cases, the Morax-Axenfeld diplobacillus can run the clinical scale from no symptoms to the most severe corneal ulcer. On the subject of the importance of such an organism no further remarks are necessary.

Until very recently it has been generally thought that this organism possessed only slight tendency to infect the cornea, and that when the cornea was attacked the resulting lesion was not serious. In Axenfeld's[4] article in Kolle and Wassermann's "Handbuch," we find the statement: "The diplobacilli possess only slight tendency to infection of wounds of the bulb corresponding to the rarity and relative inoffensiveness of the keratitis cases" (*relativenen Leichtigkeit der vorkommenden Keratitis fälle*). In marked contrast to this teaching are the recent findings of Paul,[5] Erdmann[6] and Stoewer.[6] Paul reports 26 severe diplobacillus ulcers of the cornea observed in one and one-half years. Erdmann reports 8 cases of severe corneal ulcers, and Stoewer reports 26 cases; in these three series of cases a good many eyes were lost as a result of corneal ulcers. Realizing the pathogenicity of the organism for the cornea, one idea that presents itself is that the organism should be looked for before any cutting operations are done on the cornea. Another idea that occurs to one is that in cases of acute conjunctivitis, like the cases mentioned above, it may be that an unusually virulent strain of the organism exists or that the patient is unusually susceptible, and that in such cases an injury of the cornea, such as one may receive from a cinder or other foreign body, might be a serious matter, for it might give a point of entrance in the cornea for the organism. In these cases to prevent such possibilities, I believe it would be wise to confine the patient to the house or have him use protecting goggles during the few days that are required to cure the condition.

In emphasizing the importance of the diplobacillus as a factor of danger for the cornea, I would not underestimate its importance as a pathogenic factor for the conjunctiva, for the conjunctivitis, acute and chronic, that it causes is frequently a serious annoyance to patients and they are grateful when relieved. It is a matter of interest that Axenfeld first observed cases of acute conjunctivitis caused by this organism. It is also an interesting fact that Erdmann[6] and Plaut and v. Zelewski[7] have seen cases like my Case 10, where the diplobacillus existed and caused neither objective nor subjective symptoms.

Recurring to the idea quoted above from zur Nedden, it is interesting to recall the case of acute conjunctivitis in the negro (Case 8), in which the clinical diagnosis was made of probable gonorrheal ophthalmia. Possibly the conjunctiva of the negro offers good soil for this organism; bearing on this idea data on the severity of the lesions caused by this organism in the negroes of America would be of much interest. Probably this is the first case recorded of conjunctivitis caused by this organism in the negro.

As has been said, the recognition of this organism is important from the standpoint of treatment, because we have a specific remedy for it in zinc. The rapid recovery of my cases under the influence of zinc supports the unanimous testimony as to its efficiency in combating

Fig. 1.—Morax-Axenfeld diplobacillus. Smear taken from conjunctiva.

this type of infection. Case 4 was particularly interesting from the point of view of treatment, in that the patient for weeks used faithfully the silver salts that just now occupy such an important place in the therapeutic armamentarium of the oculist. This case alone brought to my mind the idea that now, when we in America depend so greatly on the organic salts of silver as remedial agents in conjunctival infections, it

Fig. 2.—Stereoscopic photograph of a culture of the Morax-Axenfeld diplobacillus on blood serum.

would be well to point out the fact that we have with us the bacillus of Morax-Axenfeld, and that against infection with this organism these salts have little, if any, effect; at any rate they are not nearly so effective as zinc.

In the case of the ulcer, the zinc seemed to have the best effect. The idea has been suggested that there is danger in the prolonged use of zinc solution in corneal ulcers, because of the possibility of the deposition of

4. Axenfeld: Specielle Bacteriologie des Auges, Kolle and Wassermann's Handbuch der pathogenen Mikro-organismen. Jena, 1903, vol. iii, p. 480.

5. Erdmann: Ein Beitrag Zur Kenntnis der Diplobacillengeschwüre der Kornea, nebst Untersuchungen über die Widerstandsfähigkeit der Diplobacillen gegen Austrochnung in Sekreten. Klin. Monatsbl. für Augenhk., 1905, vol. xliii, 1, p. 561.

6. Stoewer: Ueber das Diplobacillengeschwür der Hornhaut Klin. Monatsbl. für Augenhk., 1905, vol. xliii, 11, p. 142.

7. Plaut and von Zelewski: Ueber den Keimgehalt der Bindehaut nach der Thranensackexsterpationen. Klin. Monatsbl. für Augenhk., 1901, vol. xxxix, 1, p. 389.

zinc in corneal tissue. It is worthy of note that in my case I used zinc sulphate for three weeks, applied every three hours, and then for another three weeks applied three times daily, and that no deposit of zinc in the tissue was apparent.

CHARACTERISTICS OF THE ORGANISM.

The Morax-Axenfeld diplobacillus, an organism which so far as known is only pathogenic for the human eye, averages about 1 micron wide and 2 microns long, the size, however, varying. When taken from the conjunctival sac the bacilli, in my experience, vary very little in width, the length being more variable as one sees both short and long ones. When grown on Loeffler's blood serum, the medium most often used for their cultivation, one sees great variations in shape and size. Taken from this medium one finds thin bacilli and thick ones, short and long ones and degeneration forms. They usually occur in pairs, end on, whether found in secretion or culture, the ends of the bacilli being slightly rounded. Frequently pairs, dividing into four, as indicated by constrictions forming in the middle of each, are met with. One may also find short chains; this is particularly so in cultures. The bacilli stain with all the ordinary dyes and are negative to Gram.

As a rule, there is not nearly so much secretion in a conjunctival sac infected with this organism as in other forms of conjunctival infection, and sometimes it is hard to obtain a mass for staining, but usually a deposit may be found on the caruncle. From such a deposit generally the bacilli are present in enormous numbers. However, variations from this occur, and sometimes, as in my Case 5, very few organisms are found. The secretion in a diplobacillus conjunctivitis consists in great part of fibrin and is poor in cells. The bacilli may lie on the cells; I have not seen bacilli within cells.

The diplobacillus can be grown only at blood temperature, and with certainty only on blood serum or serum agar or on culture media containing human body fluids. Loeffler's blood serum is a most excellent culture medium, and it is a medium which is always available, for almost every city health department supplies it for the diagnosis of diphtheria. On this medium in from 16 to 24 hours the bacilli produce a very characteristic picture, in that they liquefy the medium, forming holes in it, the bases of which are moist and without color. After a while these holes become bigger and may in due course run into one another. If the growth is allowed to continue, the culture medium may be almost completely liquefied. Of all the bacteria observed in the conjunctiva none other grows like the diplobacillus on blood serum, except the bacillus of Petit. This organism is very similar in all its characteristics to the Morax-Axenfeld bacillus, and only by cultural characteristics can it be differentiated from the latter, namely, in growing abundantly on all usual culture media and in liquefying gelatin.

[EDITOR'S NOTE: Dr. Pusey's article was discussed with those of Drs. Shumway and Weeks. These and the discussion will be published next week.]

Rules for Resident Physicians.—J. T. Rugh, in the *Jeffersonian* for May, gives the following succinct rules for the conduct of a resident physician: 1. Serve your chief by obeying his directions and those of the institution. 2. Be always ready to do your duty and as much more as time will permit. 3. Cultivate observation and reason, and acquire as large a fund of common sense as possible. 4. Have regard to your personal appearance and let it be always neat. 5. Pay attention to details. 6. Keep the eyes and ears open and the mouth shut.

TREATMENT OF LOOSENED TEETH.*

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No departure from a physiologic condition of the mouth is so readily noticed by the sufferer as a tooth which has become more or less loosened in its alveolar socket. In considering this abnormal condition of the teeth, two classes may be distinguished.

First. Those cases resulting from infection which has caused pus to spread in such a manner as to interfere with the pericemental attachment of the root to the alveolus. In such cases, the more or less speedy removal of the focus of infection will generally restore the tooth to its normal degree of solidity. Infection following a dying pulp, difficult erupting teeth, ligatures accidently left around the necks of teeth, ill-advised separating of teeth and other injudicious dental operations are the most common causes in this class, and, therefore, they can be strictly classified as localized diseases, readily cured if the cause is ascertained and removed.

Second. Those cases in which necrotic conditions prevail and the tooth becomes gradually less firm in its socket as it loses more and more of its peridental attachment. These abnormal conditions are the gradual results of some form of malnutrition, and consequently are not so readily amenable to treatment.

ETIOLOGY.

It follows as a natural result that, in order to treat a loosened tooth in a rational manner, the first thing is to make a correct diagnosis of the etiology of a given case. Every practitioner has his "red letter" cases among his records of very loose teeth, cured by the removal of a suppurating pulp; cases which have been brought to him after some worthy colleague has given up the case in despair; having erroneously treated as a pyorrheal pocket an ordinary alveolar abscess. Lest we find ourselves in the same class at some time or other, let us beware of hasty opinions of any case of suppuration. The etiology of some cases is more difficult to diagnose than that of others and often it will take the most careful differential diagnosis to reveal the true condition of affairs.

EXAMINATION OF THE TEETH.

The first thing in such an examination is to determine whether or not there are any gingival pockets, and if so, how far they extend toward the end of the root, and in many cases, when the pockets are very extensive, to determine how much peridental attachment is left. For this purpose, the pockets should be carefully sprayed with some sterilizing solution, and the examination is then best made by means of a very thin flat right angle burnisher. When the pocket extends completely from the gingiva all the way around the very apex of the root, it is generally safe to assume that there is no vitality left in the pulp of the tooth and it becomes the first duty of the operator to enter the pulp of such a tooth and to remove every portion thereof. When these pockets are of a very insignificant depth and often not at all perceptible as real pockets, the question as to the condition of the pulp is a more serious one. Recourse can now be had to the different means at our disposal of testing for pulp vitality by thermal and electric effects. This, however, is not always satisfactory. The condition of

* This paper, illustrated by lantern slides made from radiographs of clinical cases, was read in the Section on Stomatology of the American Medical Association, at the Fifty-seventh Annual Session, June, 1906.

occlusion of the particular tooth is an important matter for consideration. It is not uncommon to find a pericementitis set up, followed by the loosening of a tooth which has all the strain of occlusion of the entire jaw centered on it, caused, perhaps, by some recent filling which has not been sufficiently ground away. It should be remembered that, in an acute inflammation of a loosened tooth, there is apt to be at times some protrusion of the tooth itself from the socket. This in itself will produce a stress of occlusion at this particular point, and while it has become a detrimental factor, care should be taken not to confound it with the original cause of the trouble.

THE USE OF THE ROENTGEN RAYS.

Since the advent of the Roentgen ray in practice, it has been found of great aid in diagnosing pathologic

Figure 1.

Figure 2.

conditions, both in the pulp and around the roots of the teeth. Whenever there is any doubt on the subject of the vitality of the pulp, it is almost imperative at the present day to have a radiograph made of the part involved. For this purpose the film should be small enough to embrace only two or three teeth adjoining the affected one, for the purpose of obtaining a picture as free from distortion as possible. In a number of cases of loosened teeth, in which all the former methods of examination have proved unsatisfactory, a radiograph will frequently show the outlines of a well-defined abscess in the vicinity of the apex of the root. Whenever this pericemental abscess is found it is useless to attempt to treat it without thoroughly removing the pulp contents, for it is not an uncommon thing to find vitality still remaining in the

Figure 3.

Figure 4.

pulps of such teeth. The results of the examination and treatment in many such cases leads me to form the opinion that it is only a question of time before the infected zone will cut off the vitality of the pulp and all this material become added fuel to the inflammatory fires raging in this locality. If this conclusion is based on the results of correct observation, it follows as a natural conclusion that it is a wise thing to remove such a pulp aseptically before it has been reached by the infected material.

In many cases in which there is no question of the tooth having lost its vitality, it is impossible to determine from ordinary observation whether such a dead pulp has been removed by a previous operator, and, if removed, whether the root has been properly filled. For this purpose the radiograph is also a very valuable aid, as, under proper conditions, it will disclose the evidence of most of the generally used methods of root filling and by this means can be ascertained whether the root canal has been thoroughly filled or not. In the same manner, when suspicion exists of the penetration of the antrum by the root of a tooth, a radiograph showing the same is of value in corroborating the diagnosis.

It is not an easy matter to read a radiograph correctly. The practitioner starting to use this diagnostic field must make up his mind to study the pictures carefully at the beginning, or he will be liable to form false deductions from what he thinks he sees. This is most apparent in a picture of an upper molar, when frequently the floor of the antrum dips down between the lingual and buccal roots. The radiograph will show the

Figure 5.

Figure 6.

floor of the antrum well defined, and apparently all the roots of the tooth penetrating the same. The result will be that the beginner will suppose that all the upper molars which he examines have their roots penetrating the antrum. In the same way there are root-filling materials which will not appear in a radiograph. Later I will show a slide (Fig. 6) of an upper bicuspid, the canal of which appears not to have been filled. On entering this root canal it was found to be filled with cotton to the very end. This particular root had given no trouble for over twenty years, and during this time the tooth had never been disturbed. An examination showed a well-defined pericemental abscess and slight absorption around the end of the root, and yet this cotton was found

Figure 7.

Figure 8.

free from odor or taint of infection, it being, in fact, the only root filling of cotton that ever came under my observation that appeared to the eye to be in anything like a sterile condition. The patient had commenced to suffer from pain around the end of the root, due undoubtedly to the abscessed area in this locality, and this caused the taking of the radiograph which plainly showed the seat of trouble. The picture was read incorrectly, as it led to the false inference that the canal was unfilled. This case is dwelt on to some extent, because it illustrates so forcibly that the radiograph, while of great value as an aid in diagnosis, can not be absolutely depended on; consequently, this drawback should never be lost sight of by the careful diagnostician.

There are a large number of traumatisms coming under the head of the first class of cases which, producing a pericementitis, will be often followed by considerable loosening of the tooth. In such cases a good radiograph is of inestimable value, inasmuch as it will show up, generally speaking, an entirely healthy field, so far as the alveolar socket is concerned (Fig. 1, inflammation from imperfect gold crown). This will indicate that, with proper treatment, the tooth will return to its normal condition, and at any rate delay is indicated so far as any active operative measures are concerned.

In the second class of cases in which malnutrition under some of its manifold and devious methods is playing havoc with the nutritive supply around the alveolar sockets, the consensus of opinion at the present time

Figure 9.

Figure 10.

appears to be that in all such cases the pulp has ceased to retain its physiologic characteristics. Lack of time prevents a proper consideration of the details of this subject. It can be stated that the removal of all such pulps is a well-recognized and satisfactory form of treatment; whenever it is feasible every vestige of pulp tissue should be removed to the very end of the different roots. To this end the original radiograph will be found of great service as a guide to the operator while removing the pulp tissue.

It is best perhaps to state that in all these cases every particle of deposit and foreign matter has been carefully removed, the surfaces of the teeth have been thoroughly polished and the pockets treated both surgically and therapeutically. The patient is instructed to brush his teeth and gums carefully four times a day, and this frequent massage of the gums has a very invigorating influence on the capillary circulation. The teeth are to be retreated at the expiration of three or four weeks. In addition to this massage of the gums by the use of the tooth brush in the patient's hand, the therapeutic use of the Roentgen ray has been more or less advocated during the past two years. It has not been in use long enough for us to form a positive view as to its real value. There is a strong unanimity of opinion among careful observers that in many cases it has exerted a very favorable influence toward an improved nutritional condition. But its use for this purpose has been mostly of an empirical nature, and on this account it is necessary to advise great caution. No absolute definition of the means by which the circulatory condition is improved from the use of the *x*-ray has been discovered. It is a well-known fact that in all investigations the *x*-ray has shown no germicidal properties. The general belief is that the circulatory corpuscles are stimulated to a great degree, and yet this is a very indefinite statement. Furthermore, it is necessary to use the *x*-ray with great care and caution on account of the liability of inflammation arising from a too prolonged application. Its use might be safely started with the application of a strength of five amperes at a distance of about twelve inches. The length of time of the exposure can be safely started at about one and a half minutes and gradually increased according to the judgment of the operator. The high frequency current in various forms is also used for this purpose and has the one advantage that it appears to lack the dangerous qualities inherent in the Roentgen ray.

OTHER METHODS OF TREATMENT.

Frequently, treatment of this nature will suffice to cause sufficient repair to the deteriorated tissues so that the tooth will again become firm in its socket. In order to accomplish this result, it is essential to remember that every possible pus focus must be removed and one of these foci that frequently escapes the observer is a root of one of the multirooted teeth that has lost its entire attachment and is absolutely a necrotic appendage to the rest of the tooth. Such a root (Fig. 8) must invariably be amputated and removed in order to remove from the field permanently every possible focus of infection. After such a necrosed root has been removed, the best results can only be attained by replacing it with a porcelain substitute, the technic of which I have described elsewhere[1] (Fig. 7). After a trial of more than seven years, it can be safely asserted that this operation is a very valuable means for the preservation and tightening of loosened teeth. About 85 per cent. of the cases operated on have resulted favorably; considering the fact that some of the cases were experimental, the results achieved are very satisfactory.

A tooth that is loose and wobbly is only a source of discomfort and the irritating nature of such a tooth materially tends to increase the unhealthy condition of its own environment. A tooth in such a condition should either be removed, or, if saved, it must be placed in such a state that it will cease to be a source of discomfort and irritation. When the different methods of treatment previously outlined have failed, there remains the last resource of uniting loosened teeth to each other, or to teeth which are in a healthy condition. This operation[2] has been found invariably successful in the retention of teeth that seemed doomed to the forceps (Figs. 11 and 13).

Figure 11.

Figure 12.

Figure 13.

The one thing to remember in the treatment of all the loose teeth of the second class is that after the mouth has been made comparatively comfortable and the loosened teeth firm this condition can only be maintained by careful prophylactic treatment once every month at the hands of the dentist and dental nurse.

1. Items of Interest, February, 1904, and Dental Cosmos, September, 1902.
2. Dental Cosmos, March, 1888, and Id., May, 1903.

NOTE: Dr. Rhein then exhibited on the screen a large number of lantern slides of radiographs taken from clinical cases. A few of these are here reproduced.

Figure 1 illustrates a normal physiologic maxilla with the exception of a gold shell cap over the first bi-cuspid. This tooth had been somewhat loose from the irritation produced by this badly constructed cap, and the radiograph shows distinctly that the trouble does not extend much beyond the gingiva of this tooth. The removal of the cap is sufficient to cause the tightening of the loosened tooth.

Figure 2 is a radiograph of the mouth of a man, aged 54. It has a number of interesting features, but the main one centers around the apical portion of the roots of the second molar, which shows a well-defined abscess, although no suspicion of this existed. After this radiograph had been taken the pulp cavity was at once entered and found to be filled with a foul-smelling, putrescent material. In this mouth there were four other teeth in like condition, and the patient's general condition was very much deteriorated as a result of so much septic matter. The removal of these numerous pus foci caused a rapid and marked improvement in the general condition.

Figure 3 shows another mouth with practically the same history. Over the first bi-cuspid can be seen the outlines of a well-marked pericemental abscess. The same condition is evident in the first molar. Neither of these teeth had any fillings or defects in their crowns.

Figure 4 is a radiograph of the same mouth a week after the putrescent pulp had been removed from the first bi-cuspid, and the root had been filled. There is already evident a marked improvement in the tissue conditions around the apex of the root of the first bi-cuspid.

Figure 5 demonstrates the effects of calculary deposit on the side of the root of a molar, and one that has escaped the visual examination of the operator.

Figure 6 illustrates the case described at length of a root filled with cotton over twenty years, when suddenly an intense neuralgic condition started up around the end of the root, due to the abscess shown at the point of the arrow in the illustration. The artificial crown on the first bi-cuspid distinctly shows the root filling, but the fact that the root of the second bi-cuspid has been filled is not at all perceptible in the radiograph, and illustrates the point of the necessity of careful study of radiographs in order to be able to read them properly. This particular abscess was cured by the removal of the cotton root-filling and the application of electrolysis through the end of the root for a period of seven minutes with three milliamperes of current.

Figure 7 is a radiograph of an upper molar after the lingual root had been removed and replaced by a porcelain substitute. The root that is visible is the porcelain substitute.

Figures 8, 9 and 10 show three different stages in the mouth of a man 55 years of age who had been a sufferer from arthritic pyorrhea alveolaris for years. There were numerous pericemental abscesses in this mouth that were located by means of the radiograph. The first and second molars here illustrated were so loose that they wobbled from side to side and could have been easily removed by the patient himself.

Figure 8 illustrates that the pulp of the second molar had been thoroughly removed and the roots filled to the very end. It also indicates that the lingual root had lost all its attachment and was practically a foreign body and should be removed. The first molar was found to be in a still worse condition. The previous dentist had not been able to find the canals of the buccal roots. The lingual root in this tooth is also entirely devoid of attachment and partly absorbed. The first thing accomplished in this case was reopening into the pulp cavity of the first molar and the thorough cleansing of the buccal roots and filling of the same as shown in Figure 9. The lingual roots of both teeth were then amputated and porcelain substitutes for these made. Two iridiumized platinum staples were bent into shape: one extending from the porcelain root to the second molar across the occluding surfaces and into the pulpal cavity of the first molar and vice versa; a staple from the porcelain root of the first molar, across the occlusal surfaces into the pulpal cavity of the second molar. These staples were fastened in with amalgam, which entirely contoured the crowns of both molars, making a perfect splint, and holding the two teeth rigidly together.

Figure 10 is from a radiograph showing the complete operation of the two teeth splinted together and showing the two porcelain substitutes in place of the necrotic roots that were amputated.

Figure 11 illustrates a superior central incisor with very bad pyorrheal pockets. The tooth was very loose and could be moved in and out at random with the tongue. The wide space between this and the adjoining incisor made the case more than usually difficult. The illustration shows the condition of the parts after it had been successfully splinted to the adjoining lateral incisor.

Figure 12 is a radiograph of a pyorrheal condition surrounding the lower incisor, which, as is readily apparent, was almost ready to drop out of the mouth.

Figure 13 illustrates the method used to preserve this incisor in a firm condition, retaining all the esthetic beauty of this and the adjoining teeth. The splint here shown is only observable on the lingual side and can not be seen without the aid of a mouth mirror.

38 East Sixty-first Street.

INTERSTITIAL GINGIVITIS DUE TO AUTOINTOXICATION

AS INDICATED BY THE URINE AND BLOOD PRESSURE —DIAGNOSIS.*

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In a former paper, "Interstitial Gingivitis Due to Autointoxication," I discussed etiology; in my work on "Interstitial Gingivitis, or So-called Pyorrhea Alveolaris" I demonstrated the pathology; in this paper I propose to discuss the method of diagnosis in interstitial gingivitis. It has been demonstrated that this disease originates from autointoxication. It is justifiable, then, to state that interstitial gingivitis is dependent on the circulation and the vasomotor system. It is, then, a profitable subject for investigation. Before discussion of this phase of the subject, it is necessary to become familiar with the structures involved, which in themselves are unique. There are no other structures in the human body like them. I have gone into details many times in a description of these structures. I will now only discuss them in a general way. The alveolar process is a bony structure intended to hold the teeth in position; when the teeth are removed the process absorbs; therefore, it is a transitory structure. In the evolution of the head, face, jaws and teeth, the process including the jaws grows smaller, the teeth and process change their shape, making the alveolar process doubly transitory. Transitory structures are more easily involved by disease than any other. Some of the lower vertebrates shed their teeth continuously. A tooth comes into place, is used a short time, is shed and a new one takes its place. This continues throughout the life of the animal. Man has two sets. He sheds the first, after they have performed their functions, and a new set takes its place. As soon as the alveolar process has developed about them a low form of inflammation sets up absorption. I have called this osteomalacia or senile absorption. This form of absorption will continue until the teeth loosen and drop out or are extracted. It is an atavistic process. The alveolar process is an end organ. The tooth, so far as the process is concerned, is a foreign body. The arteries, capillaries and nerves pass through the bony process and stop.

* Read in the Section on Stomatology of the American Medical Association, at the Fifty-seventh Annual Session, June, 1906.

There are other end organs in the body, chief of which are the kidneys, the eye and the brain. Physicians claim, and rightly, that, because these are end organs, they are more easily involved in disease and are often the determining factors of kidney lesions. Alfred C. Croftan[1] says: "It is not surprising to find that particularly those organs that are supplied by end arteries are chiefly involved, for in them vascular disturbances must first produce nutritional derangement. Chief among the organs supplied by end arteries are, precisely, the kidneys, the retina and the brain, and, I think, this explains the frequent involvement of the kidneys, eyes and brain in Bright's disease. The fact that the retina and the brain are often found injured before the kidneys, that cases of Bright's disease run their fatal course occasionally with practically no renal changes, but with serious apoplectiform brain lesions and retinitis, bears out this conception and constitutes a valid argument against the common belief that the nephritis is the primary event and the determining phenomenon of the disease."

A marked difference exists between the kidney, eye and brain as end organs and the alveolar process as an end organ. This difference is the important point in the study of interstitial gingivitis. End arteries running into the kidney, eye and brain, owing to their soft nature, give the arterial walls a chance of expansion, permitting, in a measure, the blood to flow more easily and prolonging the tendency to disease. On the other hand, blood vessels extending throughout the alveolar process in a tortuous manner can not expand, as the result of which blood charged with toxins and subject to cardio-vascular changes immediately sets up irritation and inflammation resulting in dilatation, bone absorption and arterial degeneration. These changes, therefore, will occur much earlier in the alveolar process than in other end organs.

This is apparent to every physician in the more marked systemic disturbances, such as scurvy, malaria, drug poison, constitutional disease, etc.; the gums and alveolar process are symptomatic and are watched with greatest care. The severity of the disease, as well as its progress, may often be determined by a careful scrutiny of these tissues. It is the more obscure and simple etiologic factors to be considered at this time. The pathology is the same, whether the cause is mild or severe.

In tracing the etiology of this disease, it is at once cognizant that as one grows older the milder forms of this disease become more severe. Every individual has interstitial gingivitis to a greater or less extent. We are able, therefore, immediately to arrive at its etiology, autointoxication due to a want of proper elimination. The excretory organs of the body weaken and become senile. As age advances, the kidneys and bowels fail to perform their functions properly. We are conscious, therefore, of self-poisoning by the odor exhaled from the lungs and bodies and the accumulation of gases in the gastrointestinal tract. The effects of autointoxication on the gums and alveolar processes direct through the blood-producing interstitial gingivitis, together with the peculiar odor from the lungs and body, are, to the expert, valuable early signs of more grave lesions about to occur in the kidneys, heart and arterial systems throughout the body, especially the kidneys.

For the past ten years, I have given special study to the constitutional condition of interstitial gingivitis as indicated by the urine, the only means at hand of ascertaining the general condition of the system. The cases I wish to report are the first fifty, ranging from 27 to 67 years of age. All had interstitial gingivitis in its most aggravated form, with more or less loose teeth. Thirty-two had lost teeth as a result of the disease. Fourteen had pyorrhea alveolaris observed by the naked eye. The teeth were cleaned. The loose teeth were either extracted or fastened to other teeth. Twenty-four hours urine was obtained. A part or all was sent to the Columbus Medical Laboratory for examination. In tabulating the reports, the following results were obtained:

Specific gravity, two had 1005; two, 1006; two, 1007; two, 1008; two, 1009; one, 1010; one, 1011; one, 1012; two, 1013; six, 1014; one, 1015; five, 1016; two, 1017; one, 1018; five, 1020; three, 1023; one, 1024; three, 1025; one, 1026; two, 1027; one, 1028; two, 1029; one, 1031. There were granular casts in six reports. Hyaline casts in twelve; cylindroids in twenty-two; degree of acidity showed, one had 11 degrees; two, 12; one, 14; two, 15; one, 16; two, 17.5; four, 20; one, 22; one, 24; five, 30; seven, 36; two, 40; two, 44; one, 46; two, 56; one, 58; one, 59; one, 60; two, 62. The urea showed, two had 0.3 per cent.; one, 0.5; two, 0.6; two, 0.7; two, 0.9; two, 0.1; one, 1.1; two, 1.3; one, 1.4; four, 1.5; six, 1.6; one, 1.7; three, 1.8; one, 1.9; one, 2.0; three, 2.1; three, 2.2; two, 2.4; six, 2.5; two, 2.6; one, 3.0; one, 3.1; one, 7.1. Albumin was found in four cases; blood in six; leucocytes in forty-five; epithelial cells in forty-six; uric acid crystals in two; urates in five; oxalates in fifteen. Indican was present in every case. To make a more complete study of each individual case the following table has been prepared:

Specific gravity.	Granular.	Casts. hyaline.	Cylindroid.	Acid. degree.	Urea. per cent.
23	0	0	0	60	2.8
20	1	1	1	56	2.5
8	0	0	1	20	1
6	0	1	1	12	.6
12	0	0	0	36	1.5
31	0	0	0	44	2.6
20	1	1	1	46	2.2
16	1	1	1	52	2.2
11	0	0	1	17.5	1.4
17	0	0	0	17.5	1.6
27	0	1	1	62	2.1
20	0	0	1	24	2.2
25	0	1	0	44	2.4
9	0	0	1	16	1.5
25	1	1	1	40	3.1
29	1	1	0	58	2.6
14	0	0	0	36	2
16	0	0	0	30	1.8
14	0	0	0	30	1.5
13	0	0	0	36	1.6
13	0	0	0	36	1.6
15	0	0	0	36	1.7
15	0	0	1	15	1.6
14	0	0	0	36	.9
28	0	0	0	36	3
5	0	0	0	...	.3
16	0	0	0	...	1.6
20	0	0	0	...	1.5
10	0	0	0	...	1.1
25	0	0	1	...	2.5
27	0	1	1	62	2.1
25	0	0	0	...	2.5
14	0	0	1	20	1.3
30	0	0	0	...	1.9
24	0	0	1	...	2.4
26	0	0	0	...	2.1
18	0	1	1	...	1.6
14	0	0	1	20	1.3
5	0	0	0	15	.7
23	0	0	1	40	1.8
7	0	0	0	14	1.3
16	0	0	0	30	1.8
9	0	0	0	11	.6
14	0	0	1	22	1.5
7	0	0	0	20	.7
7	0	0	0	20	7.1
23	0	0	0	60	2.5
26	1	1	1	56	2.5
8	0	0	0	20	1
6	0	1	1	12	.6

TOTAL EXAMINATION OF URINE.

Qualitive Examination.

Physical condition:
Clear, 17.
Cloudy, 33.

Reaction:
Acid, 46.
Alkaline, 4.

Color:
Yellow, 46.
Amber, 4.

Quantitative Examination.

Indican.
50.

Microscopical Examination.

Casts:
Hyaline, 14.

1. The Alkaloidal Clinic, July, 1905.

Odor:
Negative, 46.
Present, 4.
Mucin:
Present, 30.
Absent, 20.
Albumin:
Present, trace 4.
Absent, 46.
Peptones:
None.
Sugar:
None.
Bile:
None.
Blood:
Present, 6.
Absent, 44.
Granular, 7.
Epithelial, 1.
Cylindroids, 21.
Cells:
Blood, 4.
Leucocytes, 45.
Pus, 11.
Epithelial cells, 46.
Crystals:
Uric acid, 2.
Urates, 5.
Oxalates, 15.
Phosphates calcium, 1.

These tables indicate either renal insufficiency or excessive suboxidation products producing renal strain. Where the degree of acidity exceeds forty degrees, there is excessively imperfect oxidation which, irrespective of the types of acid, underlies, as is now pretty generally recognized, severe constitutional stress allied to that of diabetic acidosis. Where the degree of acidity falls below thirty degrees, similar states occur, as G. F. Butler[2] has pointed out, from insufficient elimination. The degree of acidity is obtained by taking 5 c.c. of the urine specimen, plus two drops of phenolphthalein solution as indicator, adding decinormal NaOH until a slight pinkish color is produced. The number of c.c. of N/10 NaOH required multiplied by 20 equals the degree of acidity. Another great source of acid is the resorption products from imperfect intestinal fermentation, like indol, which is eliminated by the kidney as indican, greatly stained thereby. Wherever there is an endogenous or an exogenous poisoning with which the liver is unable to cope and the strain is thrown on the kidney, elimination proceeds through the skin, nasal and buccal mucous membranes, and hence through the alveolar process, since the last contains end organs in which useless products settle. This produces, for example, the blue line of lead poisoning, the green of copper and red of mercury.

The tendency to graver diseases as here presented is shown in the inflammation and absorption of the alveolar process. The physical condition, reaction, color, odor, mucin and the cells (since they are apt to be of local origin) are of little significance. Crystals are of limited value, since the longer the urine stands before examination the larger the number of crystals. The amount of uric-acid crystals confirms my report of some years ago.[3] In these experiments, teeth with deposits on them were extracted in which excessive absorption of the alveolar process had taken place. One hundred were sent to one laboratory and one hundred and fifteen to another. They were examined for uric-acid crystals by the hydrochloric test, the dry distillation and the murexid test. By the murexid test, twelve of the two hundred and fifteen gave positive reaction, and by the microscopic ten showed crystals, or about 5 per cent. The microscopic examination of urine in forty-six cases revealed two cases, or about 4 per cent.

Croftan[4] says: "While hyaline casts do not necessarily indicate nephritis, i. e., advanced renal inflammation, they nevertheless indicate renal irritation and should be regarded with suspicion. Covered with blood or renal elements, their pathologic importance becomes great, since their appearance then indicates distinct renal inflammation.

Urine containing hyaline casts often contains albumin in solution. The amount of coagulable albumin in solution may be minimal and, though rarely, albumin in solution, detectable by ordinary clinical methods, may be absent. The absence, however, of albumin does not exclude renal irritation nor even certain forms of nephritis.

To the category of hyaline casts probably belong the cylindroids, long bands and cylinders. These, like the hyaline casts, must be considered coagulation products of albuminous material that the tubular epithelia exude in small quantities. The factors that cause this exudation are not always determinable. Cylindroids of distinctly tubular origin are pathologic in the same sense as hyaline casts. They are often found in urine otherwise apparently quite normal. Neither they nor hyaline casts, therefore, can be considered typical evidences of patho-anatomic renal lesions, but are common in heart disease, with congestion of the kidneys, in a variety of toxic and infectious states and in irritation of the tubuli by crystals in acidosis and after epileptic fits."

Cylindruria, according to Simon,[5] is not necessarily associated with definite pathologic alterations of the renal parenchyma. This statement should likewise be accepted as to the occurrence of purely hyaline casts and their presence in small numbers. A few renal epithelial cells may be found at the same time occurring either in the urine or adhering to the casts, but never presenting an atrophic or otherwise altered appearance in the absence of definite renal lesions. The presence of compound hyaline and coarsely granular casts, as well as of waxy and amyloid casts, on the other hand, may be regarded as indicating definite changes in structure, so that, as far as diagnosis is concerned, microscopic examination of the urine furnishes information of more value than simple demonstration of albumin.

Hyaline casts are most frequently seen—reference is here had only to the purely hyaline or, at least, but faintly granular form—and are found in all conditions in which albuminuria occurs. When present in only small numbers, and particularly when occurring but temporarily in the urine, it may be assumed, in the absence of other symptoms pointing to renal disease, that there is a mild circulatory disturbance of the kidneys. Granular casts, according to Croftan,[6] invariably indicate either inflammatory processes in the kidneys or advanced circulatory disturbances (cyanotic induration). They are almost pathognomonic of nephritis, especially when coarse. The significance of blood and epithelial cells imbedded on hyaline casts is the same as the significance of blood and epithelial casts; both are pathologic and indicate nephritis. Fine granular and hyaline casts often occur from autotoxic strains on congenitally insufficient kidney in arthritic and allied states.

The presence of albumin in these cases was exceptional, it being found in but four cases. This would show that in none of these cases had disease become very marked. When present, it does not in itself indicate grave disorder, since albumin may be due to many conditions of the renal tract. It is of interest to us, since disturbance of circulation may bring about albuminuria without inducing structural change in the kidney. Purdy says: "Circulatory disturbances, in order to induce albuminuria, must include the renal vessels. In Nature they must consist of acceleration of the arterial current or slowing of the venous current, in either case resulting in increased blood pressure. . . . Again,

2. American Medicine, vol. x.
3. "Pyorrhea Alveolaris," International Dental Journal, April, 1896.
4. Clinical Urinology, p. 246.
5. Clinical Diagnosis, p. 620.
6. Clinical Urinology, p. 248.

in some derangements of the nervous system which interfere with the vasomotor nerve regulation of the renal vessels, temporary albuminuria is not an uncommon result." Albuminuria is present in autotoxic neurasthenia, epilepsy, paretic dementia, and the renal crises of locomotor ataxia.

The specific gravity ranges from 1005 to 1031, normal specific gravity ranging from 1015 to 1025. The difference depends on the amount of solids and fluids present, increasing as the solids increase, decreasing as the amount of fluids increase. Specific gravity is, hence, an index, in a general way, of metabolic change. The low degree of acidity would indicate that a certain amount of acid was circulating throughout the system.

Critical examination of these tables must convince a careful observer that in every examination two conditions are present: First, autoinfection due to intestinal fermentation and faulty elimination as represented by the indican; second, kidney overstrain and renal insufficiency due to hepatic insufficiency. When the liver fails to destroy the poisonous materials and the bowels to eliminate the toxins, overstrain of the kidneys causes the blood to become overcharged with toxins and acidity and the heart and arteries undergo degenerative changes. Cardiac hypertrophy and cardio-vascular diseases with insufficient blood supply result.

Just what the toxins or their chemical characters are, we are unable to determine at present. It would seem, however, they are unoxidized products of metabolism, as poisonous ammonium salts, xanthin and hypoxanthin, which when normally excreted from the system are in the form of non-toxic substances. Croftan[7] injected these alloxuric bases in small doses in animals, producing changes in the heart, arteries and kidneys, characteristic of Bright's disease. How these toxins act on the circulatory system is not yet fully determined. It would seem from experiments that they act in different ways. Some on the vasomotor nerves, others on the heart muscle direct, and still others on the peripheral arteries, especially those of end organs. It is known that the heart and arteries become involved before the symptoms of Bright's disease are observed.

"The old idea, then, that in Bright's disease the kidneys are primarily involved and that as a result of renal insufficiency certain excrementitious bodies are retained that produce the changes about the heart and arteries, the eye ground and brain is not tenable. This course of events sometimes occurs in toxic and infectious forms of acute and subacute nephritis, but such cases are not Bright's disease." That the heart and arteries in end organs are the first involved in autointoxication as a result of intestinal fermentation, hepatic and renal insufficiency and drug poisoning has been fully demonstrated. The heart becomes enlarged and a high blood pressure is developed. Dilatation of the arteries results, especially those in end organs, resulting in arteriosclerosis, which is present in every case.

To ascertain the blood pressure in patients suffering with interstitial gingivitis, I used Cook's modification of the Riva Rocci sphygmomanometer, this instrument being best adapted for my convenience, and is exceedingly simple. The armlet used was sold with the instrument and consists of a rubber bag, 4½ by 40 cm. The patients ranged from 27 years to 67. With this instrument the normal adult female's arterial blood pressure is 115 to 125 mm.; adult male's, 125 to 135 mm. In twenty-six females there were three who ranged between 115 mm. Hg and 125 mm. Hg and, therefore, normal. Three ranged below 115 mm. Hg and twenty from 133 mm. Hg to 180 mm. Hg. In twenty-four males there were eight who ranged between 125 mm. Hg and 135 mm. Hg and, therefore, normal. Three ranged below 125 mm. Hg and thirteen from 133 mm. Hg to 160 mm. Hg. When we consider thirteen of these patients were under 45 years of age, the high blood pressure is remarkable.

I have been unable to demonstrate whether the interstitial gingivitis is accelerated directly because of the poisons circulating in the blood vessels, causing high blood pressure because of their action on the heart, or because of their action on the vasomotor nerve governing the heart or blood vessels, or both. The effects of the toxins and extra blood pressure is to set up irritation and inflammation of the outer surfaces of the Haversian canals producing halisteresis, in the vessels of von Ebner producing Volkmann's perforating canal absorption and setting the osteoclasts at work, all producing absorption of the alveolar process.

The question arises, Which end organ is the most susceptible and first involved in autointoxication? When a man visits the physician for treatment, one of the first questions asked is, "What is your occupation?" If the man replies he is working in drugs, metals or mines, the physician examines his patient's gums to note if his system be saturated with poisons. If a physician be treating a patient for lues, the drug is administered until the "gums are touched," which is the only indication his patient is under the influence. One of the most marked symptoms of scurvy is the inflammatory condition of the gums and alveolar process, which are always taken into consideration in diagnosis.

Physicians agree the arteries in such end organs as the kidneys, brain and retina dilate under blood pressure. The arteries ramify in bone structure only imperfectly, if at all. Arteries entering transitory bone structures gradually undergo pathologic changes. After the individual has obtained his growth, they are certainly more susceptible to toxin poison and blood pressure than those either in the kidney, brain and retina. I have demonstrated these pathologic changes in the alveolar process in my work on "Interstitial Gingivitis or So-called Pyorrhea Alveolaris."

Some of the following are expected to develop: Headache, irritability, fatigue, muscle soreness, hypochondriasis, vertigo, neurasthenia, lethargy, stupor, insanity, cutaneous affections, such as pruritus, acne and urticaria; later arteriosclerosis, gout, rheumatism, Bright's disease, diabetes, uric-acid diathesis, nervous disorder, asthma, anemia and many other diseases. Before most of these conditions are apparent, interstitial gingivitis will have become firmly established, with marked recession of the alveolar process and often times loosening of teeth.

DISCUSSION.

ON PAPERS OF DRS. RHEIN AND TALBOT.

DR. M. I. SCHAMBERG, Philadelphia, said that although there are some advocates of entirely local causes of pyorrhea or interstitial gingivitis, he is convinced that men who make a careful study of this obstinate disease, which is so refractory to treatment, are of the opinion that there are underlying causes for pyorrhea which are distinctly of a constitutional nature. He agreed with Dr. Talbot as to the necessity for more frequent examinations of the blood and urine in these cases. During the past few years he has been examining the urine in all cases of pyorrhea that come to his attention, and it is remarkable to note the number of cases in which either diabetes, Bright's disease, or an excess of uric acid may be found.

7. American Journal of Medical Science, 1900.

DR. M. H. FLETCHER, Cincinnati, said that a large part of his professional time is devoted to the treatment of these cases. He agreed that this trouble is of local origin, with systematic complications of many varieties, and he considers it interesting to note that the trouble in these cases will disappear by local treatment. It is a well-known fact, he said, that the conjunctiva, or other mucous membranes of the body, are irritated in the dry stage of inflammation. Every tissue of the body is subject to irritation, with accompaniments of systemic trouble. Dr. Fletcher believes in a local cause for many disorders. It is a fact, he said, that every disease has its nervous phase; many diseases are now known to be purely nervous which were formerly thought to be organic. Any condition which produces a continual irritation may produce systemic disorders of a severe nature, and he is convinced that the systemic disorders referred to are brought about by the local irritation, which is continuous. There is an effort to throw off this foreign body, and this continuous effort of Nature to restore herself to normal results in the destruction of the tissue about the teeth, with the result that finally a pathologic or diseased habit is established; and in no instance can it be cited that this trouble does not disappear by removal of the teeth. Dr. Fletcher said that it has fallen to his lot to do considerable work in the antrum, and in hundreds of examinations of the mouth and skull he has failed to find the antrum as far forward as the canine, and in but twelve cases in a thousand antrums has he found that the roots of the teeth produced a tubercle in the floor of the antrum, as shown by Gray and other anatomists. He has found abscesses of the molar teeth discharging in the antrum where the roots come against the floor of the antrum; the roots are often uncovered, so far as bone is concerned, just as all practitioners know; on the outer surface of the alveolar process the bone is completely gone and the root covered with nothing but soft tissue. Now it is easy to understand that in gingivitis going up the root in a case in which there is no body covering to the root in the floor of the antrum, there will be extension into the antrum, with all the accompaniments. This disease is something to which Dr. Fletcher thinks stomatologists must give more attention. He has never seen a patient in whom there was not more or less calcareous deposit. He has seen a case of pyorrhea in a child of ten. In other ways the child was perfectly healthy; the disease evidently had been caused by calcareous deposit.

DR. G. V. I. BROWN, Milwaukee, said that it might be of interest to recall something of the progress of the science of this particular affection, as Dr. Talbot has brought it out. His earlier papers demonstrated, for the first time by actual microscopic study, that this disease was considerably in advance of what he had been accustomed to recognize as diseased tissue of this character. His first series of slides showed that. He next took up the question of autointoxication, and showed by slides the relation of those conditions in this disease, and again of that kind of poison to mineral and other poisons, bringing it all down to the simple proposition of an absorption and taking into the system of poison which was disastrous to tissue, which affects, first of all, that portion supplied by the very small vessels and structures of a transitory nature, such as the alveolar process. Dr. Brown said that we have all heard and read for years of the uric acid diathesis, and its relation to this disease, and now we find that uric acid, while it is a factor and sometimes represents associated disease, it is only one of many disturbing elements of a somewhat similar character.

DR. M. H. FLETCHER, Cincinnati, said that this discussion has shown unquestionably the local features of this disease, and according to his mind the proposition is quite simple; with the system loaded with intoxication there is less resistance to any kind of an irritation. If, under these circumstances, there is local irritation in this region, there is as a result a condition which we recognize in the disease. It is a well-known fact, he said, that affections of the kidneys, or other organs, weaken their powers of function, especially that of elimination, laying all the tissues especially liable to disturbance from any kind of irritation. Now, if we supply the irritation about the teeth, we produce the disease. If we remove the irritation and the intoxication, to that extent we relieve the condition and the disease.

DR. VIDA A. LATHAM, Chicago, said that this exhibition of Dr. Rhein's proves almost conclusively that the stand taken by some of the members of the Section, that dentists are pure mechanics, is certainly out of order. Dr. Latham said that we can not do without the scientific branches. Dr. Rhein's exhibition, she said, to-day has shown that the mechanical filling of those canals, their anatomic bearings, the relations of those tissues and the far-reaching effects mentioned by Dr. Talbot, have brought together both the scientific and the mechanical aspects, as perhaps has never before been done. Dr. Latham said that we have to deal with another set of tissues, the mucous glands, which form around and in the peridental membrane, and that there is a bearing of the mucous glands in the peridental tissue which has to deal with the question; these glands are also affected by the end organs, and by the arterial changes. What the exact histologic and anatomic conditions of those mucous glands are we do not know. Dr. Latham declared that it can truthfully be said that in some lines dentistry has advanced far ahead of medicine. But in these particular lines—the scientific and anatomic—we are not advancing as rapidly as in the mechanical.

PALLIATIVES FOR HAY FEVER.

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Since 1898, when I made the first announcement of the value of preparations of the suprarenal gland in the treatment of hay fever,[1] I have made many observations on myself and others with a view to determine the best of these preparations and the best method of application and administration. I have also made observations with other promising palliatives, especially pollantin. The results may be summed briefly.

I. SUPRARENAL PREPARATIONS SYSTEMICALLY.

For some individuals, and in certain seasons, the systemic action of suprarenal preparations suffices to induce and preserve comparative comfort. The stomach, however, as I have previously pointed out, is not an eligible channel of administration. The medicinal substance must be absorbed from some other mucous membrane, where it can escape exposure to the digestive juices and the action of the liver. The eye, the tongue, the nose, the pharynx may be utilized. It was, and still is, possible to attain results by using the old crude preparations of suprarenal substance, but the active principles are more easily managed on account of their effectiveness in the minutest quantities. I have employed both the adrenalin chlorid solution of Takamine and the epinephrin of Abel; the latter being marketed by a manufacturing firm under the name of suprarenalin. Suprarenalin, which appears in the form of a non-hygroscopic powder, may be made into very small tablet triturates, each containing from 1/40 to 1/10 of a grain (1.5 to 6 milligrams) of the active substance, with a small quantity of sugar of milk; and this being placed on the tongue quickly dissolves, is absorbed and becomes therapeutically active. The quantity of sugar of milk used should be the least possible to make a triturate that can be handled. I have to thank Mr. F. E. Morgan, of Philadelphia, for his skill in making for me these very small tablets, as also for his efficient co-operation in my experiments with various diluent powders, as set forth later in discussing the topical action of suprarenal preparations. The dose of suprarenalin that I find effective in my own case is 1/20 grain (0.003 gm.), placed on the

1. Philadelphia Medical Journal, Aug. 13, 1898.

tongue. This dose may be repeated in from 10 minutes to two hours, according to effect and necessity. When one remains quietly at home in a cool room, in darkness or semi-darkness, one or two doses daily will suffice. If one goes abroad in the city and takes the precaution of wearing dark glasses, a tablet every hour or two may be necessary. If one goes into the country and especially if one has to take a long, hot and dusty railway journey, local measures are likely to become necessary, in addition to the more frequent use of the lingual administration of suprarenalin. The dose varies with different individuals and with the same individual in different seasons, on different days of the same season, and even at different periods of the same day, as position of sun, temperature, humidity, precipitation, dustiness, direction of prevailing wind, cloudiness and other environmental conditions change. As a rule, those who have not before been treated in this manner respond readily to doses as small as 1/40 or 1/50 of a grain of suprarenalin, while those who have used this agent in previous years seem to need larger doses, even, at times, up to 1/10 of a grain.

When suprarenalin is not available or a druggist can not be found to make it into very small tablet triturates, or into small powders, 1 or 2 grains of powdered suprarenal substance may be taken on the tongue and allowed to remain there as long as convenient. There is no objection to swallowing it, but so much as is swallowed becomes inert, in so far as control of the hay fever syndrome is concerned. Better than this is the use of a compressed tablet (3 or 5 grains) of suprarenal substance, allowing it to dissolve in the mouth somewhat after the manner of the ordinary lozenge. But these expedients are crude and ineffective in comparison with the use of the active principle.

Adrenalin chlorid solution is not eligible for use by lingual administration, as in order to obtain the necessary quantity of active principle one would have to hold in the mouth half-a-dram or more of the commercial solution (1/1,000), and even if the mouth did not fill additionally with saliva it is practically impossible to continue so holding the fluid long enough for absorption; it must either be ejected or swallowed. Solutions of active principle (either adrenalin chlorid or suprarenalin) may be used by instillation into the conjunctival sac or into the nasal passages; the quantity, however, that may be employed in this way being rarely sufficient for systemic influence, despite its excellent topical effect.

II. SUPRARENALIN PREPARATIONS, TOPICALLY.

In the majority of cases the systemic administration of suprarenal preparations must from time to time be supplemented by their topical use, while in some cases the topical use alone suffices to keep the patient comfortable, except when the environment is particularly unfavorable. Fresh filtered solutions, powders and ointments of desiccated suprarenal substance, as used by Bates and others and by me, before the active principles had been introduced, are effective, but they are not so easily managed as preparations of adrenalin or of suprarenalin. The last-named substance may be used in solid form by sniffing or insufflation, if sufficiently diluted (1/500 or 1/1,000) with an unirritating powder. Both forms of the active principle may be obtained in watery or oily solution (from 1/1,000 to 1/4,000) for use by nebula or spray; or rubbed up either with a simple base (petrolatum, lanolin, lard, 1/1,000), or with the addition of a small quantity of a sedative and astringent agent, such as zinc oxid, may be employed as an ointment. Before these topical applications are made the nose should be thoroughly cleansed with an alkaline detergent spray, or if the application is to be made to the eye the conjunctiva should be bathed with a sedative collyrium. If ointment or oily spray is to be used, the cleansing spray applied to the nasal passages may also be oily, but if the powder or a watery solution is to be used an oily spray is evidently contraindicated. However, it is always well, some ten or fifteen minutes after the adrenalin application, to use a puff or two of some bland aromatic oily spray, that may act as a protective covering to the mucous membrane. I have given up the use of aqueous solutions of the suprarenal principles, except in the eye for local palliation, and even here in some cases it is better to apply an ointment to the lids. Sometimes I use in the nose an ointment or suppository of suprarenal substance (1/50 or 1/100), or, preferably, of adrenalin or suprarenalin (1/1,000) in cocoa butter, or a smooth base of lanolin (1 part) and benzoinated lard (2 parts), with or without the addition of zinc oxid (10 to 33 per cent.) or yellow mercuric oxid (½ to 2 per cent.). The following formulas are typical:

1.	Suprarenalin ..... gr. 1/5	01
	Wool fat	
	Purified petrolatum	
	Benzoinated lard, of each 3i	4
	Yellow mercuric oxid ..... gr. i	06

Mix. Rub well. Dispense in tin tube.
Sign: For application to eye-lids or nasal passages.

2.	Suprarenalin ..... gr. 1/5	01
	Wool fat 3i	3
	Ointment of zinc oxid (benzoinated) 3ii	7

Mix. Rub well. Add a few drops of olive oil if needed to make a smooth ointment. Dispense in a tin tube. Sign: For application to nasal passages.

More frequently, however, I find it advisable to use a snuff made according to some such formula as follows:

3.	Suprarenalin	1 part
	Zinc stearate (comp.)	100 parts
	Heavy magnesium carbonate	900 parts

Mix. Triturate well.

4.	Suprarenalin	1 part
	Zinc oxid	100 parts
	Bismuth subcarbonate	400 parts

Mix. Triturate well.

5.	Suprarenal gland substance	1 part
	Zinc stearate	20 parts
	Zinc oxid	80 parts

Mix. Triturate well.

The one I use most frequently is:

6.	Suprarenalin	1 part
	Bismuth subcarbonate	300 parts
	Zinc oxid	300 parts
	Zince stearate (comp)	200 parts

Mix. Triturate well.

These preparations can be snuffed up into the nasal passages or may be insufflated by means of a powder-blower. I have used as diluents of the snuff a number of other agents, as, for example, boric acid, sodium borate, sodium bicarbonate, starch powder. I have also added at times to snuff powders or as constituents of ointments or "nasoids" ("nasal suppository") minute quantities of menthol, camphor, cocain, antiyprin, acetanilid. With some individuals boric acid or sodium borate or sodium bicarbonate answers better than the diluents given in the foregoing formulæ, but in most cases they irritate more or less. Starch powder—marante being the form used—proved irritating in every case in which it was tried, so that but a few experiments, some half dozen, were made with it. Menthol, camphor, antipyrin and acetanilid proved decidedly irritating in my own case, but for a few patients were found to be

desirable additions, assisting in the cleansing and opening of the nasal passages and giving an agreeable after-sensation. Cocain and alypin were always palliative, the former assisting markedly to free the respiration, yet for prudential reasons I rarely prescribe it. Orthoform proved too irritating to be persisted with. Despite the initial smarting it produces, anesthesin (1 to 500) was useful in a number of cases. But for its lightness, zinc stearate would have been by far the best diluent powder of any that was experimented with. Being so light, unless great care is observed in snuffing it up or in insufflating it, it is quickly carried into the pharynx and sometimes into the larynx, inducing a rather disagreeable choking sensation, which, however, soon passes off. When the patient can be trusted to make the application carefully, a snuff of 1 part of suprarenalin in from 100 to 1,000 parts of zinc stearate meets all the requirements. The bismuth subcarbonate, the heavy magnesium carbonate and the zinc oxid were added as unirritating substances, possessing sufficient weight to be available. In addition, zinc oxid has a slight astringent effect, bismuth subcarbonate is slightly sedative and both act as protective coverings. Perhaps the best diluent of all, could it be obtained, would be a serum powder prepared from the blood of healthy animals—preferably horses or goats, to avoid the danger of unrecognized tuberculosis. The anti-tetanic serum powder and anti-diphtheritic serum powder on the market would answer, but these are unnecessarily expensive, their specific antitoxic properties not being requisite for this special use. I have also used with success a snuff consisting of suprarenal gland substance (1 to 5 per cent.) zinc stearate and bismuth subcarbonate or zinc oxid. This is less expensive than the suprarenalin snuffs.

III. POLLANTIN.

Dunbar's antipollenic serum is a distinct addition to our resources and its effects are positive in from 30 to 50 per cent. of the cases met with. I have not found it to be more than a palliative, however, in any instance, and in those cases in which the suprarenalin preparations are effective pollantin offers no advantage over them that I have been able to see or to experience. In not a few cases pollantin or suprarenal snuff can be used indifferently with about the same useful palliative result. This has been my own personal experience. Either pollantin (spring) or suprarenalin with zinc and bismuth powder gives me relief for from two to ten hours, according to environmental conditions; both failing to give relief for more than ten or fifteen minutes, while on a long and dusty railway journey. In some cases, however, in which the suprarenalin preparations fail entirely, pollantin controls the symptoms. In a less number of cases pollantin fails and suprarenalin succeeds. In still other cases, about one-third of all, according to my observation, both pollantin and suprarenalin fail to have any marked effect.

Both pollantin and suprarenalin snuffs must be used properly to be effective. The nose should first be cleansed, then a small quantity should be sniffed into each nostril and thoroughly distributed by titillation after the manner of the elegant snuff-takers of former generations.[2] This titillation should be done with the head thrown well back, so as to bring the nasal fossæ as near as possible into a vertical position. For this purpose one may lie down and should, in any event, remain recumbent for some ten minutes after the snuff-taking, if at all possible. The snuffing of pollantin or the snuffing or insufflation of suprarenalin powder, as the case may be, should be done the first thing in the morning, preceding the toilet, and if thoroughly done and if the ten or fifteen minutes of recumbency be observed, such an application will protect for several hours, if not for the whole day, under favorable conditions; especially if the additional precaution of using two or three puffs of oily spray as a protective be carried out, as advised in a previous paragraph. In the use of pollantin one should be careful to prescribe and to obtain the "spring pollantin" in the spring and the "autumn pollantin" in the fall. As I have previously suggested,[3] it would be still more desirable that a number of specific pollantins, as grass, rose, goldenrod, ragweed, etc., should be prepared, in which case the number of persons relieved by one or the other of these preparations would doubtless be much greater than the 30 to 50 per cent. of all sufferers for whom the preparations now in the market are suitable and effective.

IV. INTERNAL MEDICATION.

In some instances in which one or more of the measures already described proves but partially successful in controlling the symptoms of hay fever, relief may be aided and often completely achieved by the judicious internal administration of belladonna or its active principle or some modification thereof. Minute doses are necessary, and these should be taken at intervals determined experimentally in the individual case. I find it convenient to use atropin sulphate or hyoscin hydrobromate or, sometimes, eumydrin, which last bears the same relation to atropin that heroin bears to morphin, being a methyl substitution product (methyl-atropin-nitrate). The dose of the hyoscin salt or the atropin salt is from 1/2,500 to 1/500 of a grain (1/40 to ⅛ milligram). Ordinarily I employ about 1/2,000 of a grain. The dose of eumydrin is from 1/200 to 1/64 of a grain (0.3 to 1 milligram). The following are illustrative formulas:

7. Hyoscin hydrobromate ..... gr. 1/100	0006
Camphor monobromate ..... gr. ii	12
Milk sugar ..... sufficient	

Mix. Triturate well. Divide into 20 tablets (or capsules).

8. Atropin sulphate ..... gr. 1/50	001
Camphor monobromate ..... gr. v	30
Peruvian balsam ..... sufficient	

Mix. Divide into 20, 24, 32 or 40 equal parts and dispense in capsules.

9. Eumydrin ..... gr. i	05
Milk sugar ..... sufficient	

Mix. Triturate well. Divide into 100 or 200 tablets (or capsules).

The dose of any of the foregoing preparations is one tablet (or capsule), to be repeated every ten to ninety minutes until the sneezing and running of the nose are controlled, after which one tablet (or capsule) may be taken every second, third or fourth hour, as may be necessary to maintain the effect. Eumydrin, if given in doses of 1/200 or 1/100 grain, is, of course, not to be repeated so frequently as atropin or hyoscin in doses of 1/2,000 or 1/1,000 grain. Its effects, moreover, are much slower in development.

Patients are told what the unpleasant effect of an overdose of any of these agents would be, and are warned not to take sufficient of the drug to cause notable dilatation of the pupil or dryness of the throat or disturbance of vision. They are also advised to take not less than

2. I owe these suggestions to one who, although a layman in medicine, is an "adept" in hay-fever "treatments," as well as in jurisprudence.

3. System of Physiologic Therapeutics, vol. xi, page 64.

a wineglassful of water with each dose. The addition of camphor monobromate seems useful, and sometimes a small quantity of quinin, say ¼ to ½ of a grain, may also be added to each dose, although this has not the same applicability in hay fever as in ordinary coryzas.

In many cases it will also be found useful to administer the so-called antilithic remedies, as piperazin quinate, lithium citrate and sodium salicylate. In a few instances I have found a combination of sodium salicylate and sodium benzoate beneficial.

The following formulas are illustrative:

10. Piperazin quinate
Lithium citrate
Sodium salicylate (true) of each. gr. iii | 20
Mix. For one capsule. Sign: One capsule with half a tumblerful of water, after meals and at bedtime (4 times a day).

11. Sodium salicylate (true).....3iii | 12
Sodium benzoate (true).....3vi | 24
Essence of pepsin.....f3i | 60
Tincture of nux vomica.....f3i | 4
Peppermint water, sufficient to make...f3iv | 120
Sign: 2 fluidrams (teaspoonfuls) in (or with) one-half tumblerful of water, every fourth hour, for four (or five) doses daily.

Mild alkaline carbonated mineral waters are always helpful and patients should be advised to take freely during the hay fever season any palatable water of these groups; for example, one of the numerous American lithia or "Vichy" waters or imported Vichy (Celestin), or Giesshuebl or Fachingen. If preferred, tablets of lithium carbonate or lithium citrate may be used to make an artificial mineral water.

V. ASTHMATIC PAROXYSMS.

If the palliative measures already described and the general precautions to be set forth in conclusion are carried out systematically, asthma is not likely to occur. To relieve an attack, a tablet of suprarenalin may be placed on the tongue (1/10 grain, repeated, if necessary, every 10 to 20 minutes); or suprarenalin or adrenalin solution (1:1000) may be applied to the nose by spray or cotton wad; but a hypodermatic injection of 10 to 20 minims of adrenalin or suprarenalin solution (1:1000) is usually the quickest method. If for any reason the suprarenalin preparations are contraindicated, chloroform or ethyl chlorid may be inhaled with due care and not to the induction of general anesthesia. Patients very prone to asthma may be given prophylactic inhalations of ethyl iodid (3 to 10 minims every 3 to 4 hours); or one of the following prescriptions may be taken:

12. Aspidospermin hydrochlorate .....gr. iii | 20
Hyoscin hydrobromate .....gr. 1/100 | 005
Peruvian balsam .....sufficient |
Mix. Make 24 capsules.
Sign: One every hour for 10 to 12 hours daily, or as needed.

13. Morphin hydrochlorate .....gr. 1/6 | 01
Strychnin sulphate .....gr. 1/30 | 002
Hyoscin hydrobromate .....gr. 1/250 | 0002
Atropin sulphate .....gr. 1/250 | 0002
Sterilized water .....m xx |
Dissolve. Sign: Use by hypodermic injection.

14. Codein sulphate .....gr. ii | 12
Hyoscin hydrobromate .....gr. 1/40 | 002
Mix. Make 6 (or 8) pills. Sign: One pill at 6 or 7 p. m. and one pill at 8 or 9 p. m.; a third pill may be taken at 10 p. m. or later if needed.

15. Strong tincture of passiflora incarnata..f3ii | 60
Dose: 10 to 30 drops in water every 10, 20 or 30 minutes, as needed, to relieve distress in breathing. Four fluidrams must not be exceeded. Should drowsiness, vertigo or nausea occur, the medicine is to be discontinued.

It is only rarely that the last prescriptions will become necessary. Obviously such measures demand care in application and the indications for their use must be clear.

VI. GENERAL PRECAUTIONS.

Those who are able to go to an immune region usually need no additional palliation. The less fortunate must, in addition to the use of one or more of the expedients detailed in the foregoing paragraphs, observe certain precautions. Exposure to dust, to smoke, to direct sunlight, to heat, must be avoided or minimized. Sometimes it is advisable to wear cotton filters in the nostril when exposed to the dust of city streets, when walking or driving on country roads, and especially during railway trips. Dark glasses will also be found extremely useful. Hurry and excitement are to be avoided, if possible. The bowels, the skin and the kidneys must be kept normally active or even a little stimulated.

Diet must be simple and on the whole sparing. Shellfish and elaborate mixtures are usually harmful. Meat is to be avoided or cut down to the lowest possible point. Pastries and sweets should be avoided. Concerning fruits, marked idiosyncrasies exist. Peaches, if pared, can usually be enjoyed, but the fuzzy skin distresses many persons. Strawberries cause aggravation of symptoms in a few hay-fever patients. Melons are not only palatable and refreshing, but have a slight diuretic action that is often helpful. A tepid bath, followed by a brisk cold rub, just before going to bed, and a hot sponge, followed by a brisk cold rub, in the morning, after the rest following pollantin or suprarenanal snuffing, will be found to conduce very much to comfort. Also advantage should be taken of every opportunity for rest and quiet.

By utilizing some or all of the palliative measures described, not in unintelligent routine, but varying the expedients with the individual and the occasion, the vast majority, probably at least nine-tenths of those hay-fever sufferers who are unable to take the best course—namely, flight to a region of peace—may be enabled to get through their season of tribulation with a minimum of discomfort, and even to enjoy, from time to time, hours and sometimes days of complete relief. In these intervals they have opportunity to realize the truth of the poet's utterance, "Life's keenest pleasure is surcease of pain."

THE VALUE OF ROUTINE URINE EXAMINATION.

A STATISTICAL INQUIRY.*

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If an excuse for writing a paper of the above title is necessary, it may be found in an article published in THE JOURNAL of the American Medical Association, March 18-25, 1905, by Dr. Richard C. Cabot, Boston. The title of that paper is: "A Clinical Examination of the Urine. A Critical Study of the Commoner Methods."

The last two paragraphs of the paper are as follows: "The attempt to estimate the anatomic condition of the kidney by the measurement of albumin and the search for casts is fallacious in the extreme." "The most reliable data about the urine are those most simply and quickly obtained, the twenty-four hour quantity, the specific gravity and the color."

To quote the title of the paper and these last para-

* Read by title before the Philadelphia County Medical Society.

graphs alone is to make it appear that Dr. Cabot believes that clinical examination of the urine is "fallacious in the extreme."

As a matter of fact, Dr. Cabot attempts to prove by the investigation of a large number of urine examinations made at the Boston City Hospital, and a comparison of autopsy findings in the same cases, that albumin and casts in the urine do not always mean that a pathologic nephritis is present in the case, and, on the other hand, that a true pathologic nephritis may be present without the presence of albumin or casts in the urine. The paper is an extremely valuable one because it settles in a certain way that nephritis, in common with other diseases, may not always be surely diagnosed from one symptom alone, and because it calls renewed attention to the well-known fact that albumin and casts in the urine do not warrant the diagnosis of Bright's disease.

But I consider it an extremely dangerous paper to spread broad-cast among the medical profession. Many men will read the title and the conclusions alone and will jump to the opinion that if such an eminent authority as Dr. Cabot believes that Bright's disease can not be diagnosed by urine examination, then surely urine examinations are useless. It is true that a careful reading of the paper will not justify such an opinion, but I fear that will be the ultimate effect.

Everyone who has seen much of medical practice throughout this country, must realize with sincere regret that the more careful laboratory helps in diagnosis and treatment of disease, including urine examinations, are woefully neglected by the average practitioner of medicine. I fear that Dr. Cabot's paper will help to make the average man more careless, instead of helping him to make a more accurate diagnosis, as it surely was meant to do, and as it surely would do, if read carefully. The trouble is, I repeat, that it will be generally read by the title and the conclusions, and will thus give an erroneous idea of the author's meaning. Everyone knows that even though albumin and casts in the urine may not always mean nephritis, that their presence in the urine does mean that a vital organ is at fault, and this fault should be duly weighed in diagnosis, prognosis and treatment. Then, too, there are other conditions of the urine which are of the greatest importance, such as the presence or absence of glucose, of pus, of blood, persistently or intermittently large quantities of urine, etc., all of which should be made a note of in routine examinations.

During the past eighteen months I have kept notes of the color, specific gravity, albumin, sugar and microscopic findings of 1,666 urine examinations. Of these, 1,346 examinations showed entirely normal urine; 320 examinations showed something abnormal about the urine. The urine of 763 patients was examined; 669 patients had entirely normal urine; 94 had some abnormal sign in the urine.

It will be seen that approximately 20 per cent. of the urines examined were abnormal and about 12 per cent. of the patients whose urine was examined showed something abnormal in the urine.

If these abnormalities can be shown to have any effect of importance on either diagnosis, prognosis or treatment, surely then it is worth while to examine five urines to find one abnormal one. The work is, of course, tedious, it takes time, but it assuredly can be done by the busiest practitioner and in my opinion it should be done and must be done if we are to advance in scientific methods. I have worked as a general practitioner long enough to test the value, and here make the appeal that every general practitioner provide himself with a private laboratory in which to work.

I have divided the cases which showed some abnormality into the following groups: First, 21 cases, showing either chemically or microscopically an abnormality which on further examination was found to be of no pathologic importance; second, 5 cases, showing albuminuria of pregnancy; third, 7 cases, showing acute nephritis (with apology to Dr. Cabot); fourth, 2 cases, showing urine of hysteria; fifth, 4 cases, showing urine of diabetes mellitus; sixth, 2 cases, showing lactosuria during the beginning of lactation; seventh, 1 case, showing diabetes insipidus; eighth, 11 cases, in which there was severe arteriosclerosis with albumin and casts in the urine; ninth, 9 cases, showing true interstitial nephritis; tenth, 15 cases, acute conditions, developing during the course of the disease, severe albuminuria with casts and albumin; eleventh, 1 case, showing albumin caused by a beginning menstrual period; twelfth, 2 cases, in which there was cardiac disease with severe renal complications; thirteenth, 3 cases, in which there were chronic conditions, developing severe albuminuria and casts; fourteenth, 11 cases, showing a local condition of the genitourinary tract.

Now as to the 669 patients whose urine was found to be entirely normal, it was of the greatest value and comfort to know, for instance in a case of convulsions, that the urine was normal, and that the kidneys need not be taken into account in the treatment, or in a case of unconsciousness to know that I was not dealing with a uremic coma, indeed, it seems to me that often the negative finding is about as valuable as the positive, but it is the 94 abnormal cases that we want chiefly to consider.

I shall not cite all of these cases, of course, or I would be tiresome, but shall give only an abstract of a few of the important ones. I desire here to state that I have in my possession the case histories of each of these 94 cases, so the pictures are not fanciful. Of the first group of 21 cases, thirteen patients were pregnant women showing a trace of albumin, but repeated examinations showed the albumin to be of no pathologic importance, and probably due to a leucorrhea. One case is worth quoting:

Case 1.—A young single woman was rather suddenly seized with constant vomiting, severe headache, apparent delirium. The physician in attendance had discovered albumin in the urine. Careful examination showed the urine to be of small quantity—high specific gravity—with a trace of albumin. Microscopically there were no casts, but numerous leucocytes and epithelial cells. The urine examination did not justify the diagnosis of uremia, and a careful physical examination showed the patient to be pregnant.

This case proves Dr. Cabot's point, of the error of diagnosing Brights disease on insufficient grounds:

The five cases of albuminuria of pregnancy showed the great importance of routine examinations, and I fully believe that if no other cases needing treatment had been found save these five alone, that the whole work would have been justified. I believe the doctor is almost criminally neglectful who has a case of puerperal convulsions, in which he has had any opportunity of examining the urine and has not done so.

Case 2.—Mrs. L., ii-para. With the first child there was considerable puerperal toxemia with albuminuria and casts in the urine. She became pregnant again in June, 1904, and immediately consulted me. Remembering her previous condition I urged a frequent urine examination. In July, 1904, the urine was normal. None was sent until November, 1904, when I called at the home and urged her to send me a speci-

men every week. The specimen sent at that time was normal. She neglected to send another specimen. In the early part of December I was called and found her in convulsions with the urine full of albumin and casts. In spite of treatment she died in 48 hours.

This case not only proves that a urine examination is necessary, but that it should be made frequently in the later months of pregnancy.

The next group of seven cases of acute nephritis were all of the same character; none of them could, by any possibility, have been suspected as nephritic cases so early, had a urine examination not been made in a routine way. I believe all the patients were saved from a seriously prolonged illness, perhaps some from death.

Anyone can suspect nephritis when the individual has edema or a convulsion, but it is then frequently too late to lead the patient to health.

CASE 3.—George H., married, a mill worker, called at my office complaining of malaise, aching limbs, headache, loss of appetite. The heart, lungs and abdomen were normal. The temperature was 101 F. I supposed the case to be influenza and told the patient so, but ordered a specimen of urine.

Examination showed much albumin and many epithelial and blood casts. The case ran a typhoid course of acute nephritis.

Surely no diagnosis of nephritis could have been made at that time without a urine examination and surely it was only because the habit had been formed by me of making routine examinations that one was made. All the other cases were exactly of the same character.

The cases of diabetes mellitus and diabetes insipidus and of lactosuria were of the greatest importance. None of them would certainly have been diagnosed had I not made a habit of examining the urine regularly.

CASE 4.—Diabetes mellitus. Otto D. was seized suddenly with pneumonia. Examination of the urine showed 5.5 per cent of grape sugar. Questioning revealed the fact that for some months previous to his attack of pneumonia there had been the classical symptoms of diabetes mellitus. These symptoms had been disregarded and the routine examinations were the first to reveal the presence of sugar. A particularly unfavorable prognosis was made, which was upheld by the unfortunate termination of the case.

CASE 5.—Diabetes insipidus. Charles J. came to my office complaining of thirst, pain in the back and polyuria. Examination showed a large quantity of urine—eleven quarts in 24 hours, having a specific gravity of 1,001 and free from albumin, casts or sugar.

CASE 6.—Lactosuria. Mrs. L., iv-para. On the third day of the puerperium the urine, which was being examined for albumin and casts which had been long present, showed the presence of sugar by Fehling's test. Careful subsequent examinations showed this reducing agent to be some other body than grape sugar, and in all probability lactose. It disappeared from the urine in a few days.

No amount of speculation could have made a differential diagnosis in those cases without a urine examination.

The group of arteriosclerosis cases shows, perhaps, the value of Dr. Cabot's paper equally as well as the next group of true cases of nephritis; and at the same time it shows, I think, the great value of examining the urine of every patient coming under our care. In order to draw the line between the cases of arteriosclerosis with albumin and casts in the urine, and the true cases of nephritis with arteriosclerosis, the following points should be kept in mind:

First, almost all cases of arteriosclerosis have albumin and casts in the urine, but the urine is usually of normal quantity and specific gravity. The heart shows signs of myocarditis, while the symptoms are those referable to general arteriosclerosis, rather than to a uremic condition.

On the other hand, the true cases of interstitial nephritis usually have large quantities of urine of low specific gravity with considerable hypertrophy of the heart and marked accentuation of the second aortic sound with eye symptoms, or attacks which are truly uremic.

CASE 7.—Mrs. R., aged 64, had extensive arteriosclerosis, much dyspnea, and irregular heart action. On many occasions the urine of this patient showed a trace of albumin and a few casts, but always the symptoms were dyspnea and cardiac palpitation. At no time were there uremic symptoms.

CASE 8.—Mrs. S. had marked arteriosclerosis, retinitis and hypertrophy of the left heart. The urine was always of low specific gravity with constant albumin and pale, granular casts. Uremic symptoms developed and she died in convulsions.

The group of acute cases developing albumin and casts shows the absurdity of treating acute conditions without repeated urine examinations. The same may be more forcibly said of chronic cases.

Every careful practitioner has seen serious complications arise in acute and chronic conditions, the cause of which was entirely unsuspected until the urine was examined. If the practitioner had been in the habit of examining the urine at regular intervals, the cause of the untoward symptoms would have been found before these symptoms became a serious complication.

As an instance of the first of these:

CASE 9.—A case of pneumonia. The patient, D. F., had a very severe attack of pneumonia of the right lung, with increasing dullness of mind. Examination of the urine showed a gradually increasing amount of albumin and numerous casts showing the severity of the toxemia. The prognosis was guarded and the termination showed its propriety.

CASE 10.—Mrs. H., in course of an ordinary case of tuberculosis of the lungs, became suddenly unconscious. Examination showed the urine to contain albumin enough to cause it to become solid on boiling. She died of uremia. The presence of nephritis was not suspected because the urine had not been regularly examined.

The last group of local genitourinary cases show equally as well as the others the great importance, indeed the absolute necessity of a urine examination before a diagnosis even can be made, not to speak of treatment. This group contains two cases of pyuria due to stone, four cases of acute renal colic with passage of a small calculus, one case of cystitis and four cases of hematuria.

How futile even a guess in these cases would have been and how easily the diagnosis was cleared up by the microscope is shown by Case 11.

CASE 11.—A young man was suddenly seized with pain and tenderness in the region of the appendix. Tenderness and muscular resistence were extreme. Very frequent urination attracted attention to the urine. There was free blood in the urine. In a few hours a small renal calculus was passed. This patient might easily have been operated on for appendicitis had a urine examination not been made.

I therefore claim, as proven by these cases, which, of course, are not unique, that a urine examination is of the utmost value indeed, and that a tentative diagnosis only can be made without it in as many as 12 per cent. of all cases treated.

I further claim that the examination should be routine. To examine the urine only when symptoms point to the genitourinary tract is to miss the diagnosis in many important cases, and often if the examination is made only after such symptoms appear it is too late to intervene for the patient's recovery.

I again call attention, therefore, to the absolute necessity of a clinical laboratory at each practitioner's command, if he desires to give full value of his service to his patients.

Clinical Notes, New Instruments, Etc.

A REMARKABLE OSTEO-CALCAREOUS TUMOR IN THE NOSE.

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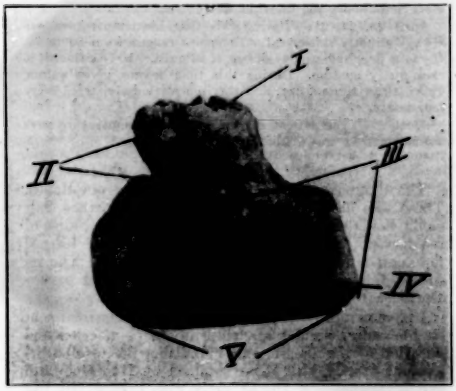
OMAHA.

Patient.—The patient, L. S., a girl aged 15, American born, parents Norwegian, was referred to me by Dr. Jensen, Newman Grove, Neb., March 27, 1906. She was well nourished, above average height and weight. Her appearance was healthy, with no deformity except that she was a mouth breather and had a full bridge to her nose. She has had no serious illness, but complained of having had headaches and a dull feeling over her forehead, and catarrh of the right side of the nose, as long as she could remember. July, 1905, her nose became totally occluded, and the headaches and heavy feeling of the forehead increased. Dr. Jensen informs me that one year ago her mother had a suspicious growth (carcinoma) removed by him from the cervix uteri. Her father is well. She has four brothers, all healthy at present. Dr. Murdock informs me that he removed a tuberculous sequestrum from the arm of one of them about three years ago, but that the boy is now quite well.



Tumor, actual size. I. Facet where tumor was attached to the ethmoid. II. Foramina of nutrient vessels to tumor. III. Putty moulding where tumor was scraped and taken away in small pieces. IV. Portion of tumor adjacent to antrum of Highmore. V. Base of tumor, which rested on floor of nasal cavity.

Examination.—On examination of left nasal space the deviated septum was seen to be the cause of almost total occlusion of the left nostril, the convexity being one-quarter of an inch from the nasal spine in front. She could force air through this side with difficulty. The right side had a commencing corresponding concavity, but the whole nasal space was entirely occluded by a white mass, which on probing proved to be of stony hardness. This mass commenced about three-sixteenths of an inch back of nasal spine, and filled the nasal space so tightly that no probe could be passed between it and the walls of the nasal cavity. Attempt was made, unsuccessfully, to view it from the post-nasal space. I judged that it was probably one-half inch through, and called in the assistance of Dr. Schneider, a dentist, with his dental engine and trephine.

Operation.—The trephining was done under general anesthesia. The trephine cut with great difficulty, and when about one-sixteenth inch in it stuck and broke off. Finding the trephine impracticable I continued the boring with dental drills and burrs, with the idea of hollowing out the core and then getting hold of the tumor from behind and pulling it out forward, but on account of the intense hardness of this core the work progressed very slowly. The burrs which ordinarily cut dental tissue with but little trouble would sing over this material, making very little impression on it. We finally constructed a long heavy drill, and with this we made better progress. In four days of drilling, taking in eight sessions of over one hour each, we drilled out a core five-sixteenths inch in diameter, which was surrounded by vascular and sensitive tissue. As cocain had no effect on this substance drilling had to be stopped, and on Monday, April 2, under chloroform anesthesia, Dr. Arthur and Dr. Schneider assisting, a post-nasal plug was inserted and attempt was made to draw the tumor out anteriorly, but it was found quite immovable. I chiseled out a piece of the cortex adjacent to the antrum of Highmore. This piece was about one inch long and three-eighths of an inch in diameter, and by means of sharp curette and chisel I further removed the core of the tumor, so that in looking into the right nostril a space over one-half an inch in diameter could be seen communicating laterally with the antrum, and posteriorly with the left nares, through a perforation well back in the bony septum. As there was considerable bleeding the post-nasal plug was left in position, and the left nostril and antrum packed with iodoform gauze.

Postoperative History.—The packing and gauze were removed the next day, and irrigation of nasal chambers with small bulb ear syringe was carried out every hour.

Two days later, Wednesday, the right membrana tympani ruptured and discharged freely without the patient having complained of any pain in it, and unfortunately the left accessory nasal cavities became infected, producing so much swelling of the lids that the left eye was completely closed. Hot compresses were applied over this region, and for several days the patient ran a pus temperature between 100 and 104. Owing to uncertainty as to exact location of the pus and the foul condition in which the right nares continued, no further operative procedures were resorted to till Monday, April 9, when that portion of the cortex of the tumor in the middle meatus was observed to have slightly left the walls of the cavity, and a gentle pull with light forceps caused it to fall to the floor of the nares. I thought the body of the tumor now could be easily extracted through the nostril, and administered a little chloroform, but all my efforts, even with heavy sequestrum forceps, failed to deliver the remainder of the tumor. The following morning, Tuesday, April 9, under chloroform, I seized the body with a pair of ordinary heavy rongeur forceps, intending to break it in two, but the forceps proved false and broke. I then took a pair of heavy flat blade bone forceps and with the combined weight of myself and assistant, which the forceps fortunately stood, I managed to gnaw the body in half and then delivered the two pieces with sequestrum forceps through the nostril. The septum which was entirely occluding the left nasal space was then straightened with Roe's forceps, and as there was but little hemorrhage and the nose was very septic, no packing was used. The patient recovered with very little reaction, the temperature came down and has remained normal. The swelling on the inner side of the left eye subsided greatly. April 20 the patient returned home, the extremely foul odor which came from the nose while any of the tumor remained having totally disappeared. The septum was straight, there was a small polyp in right nares which it was impossible to remove owing to patient being entirely unnerved. The frontal and antral sinuses were both discharging into the nose and through two small fistulæ on to the face, but owing to the timidity of the patient no further operation was considered advisable, as the drainage from the nose was improving and there were no pressure symptoms.

The growth was evidently a calcified osteoma of the nose with origin probably from the roof of the nares. I report the case thus fully because the occurrence of such a growth is very rare and the means employed in removing it might be of interest. Unavoidably I lost several pieces of the growth, and a great part of it was dissolved by the dental drills and curetted away in fine scrapings, so that from the fragments I have built up the tumor in its original shape for the purpose of illustration.

Bosworth says: "While it is not an especially rare occurrence for the nasal cavity to be invaded by an osseous tumor, which has its origin in parts beyond, a neoplasm of this form developing in this region is much less frequent." Lenox Browne in his latest work refers to one removed by LeRoe "as large as a hen's egg" as unique. Very little is said by the authorities as to the structure, except that there are two forms, the cancellous and the eburnated. This tumor had lost the character of bone in the center and by the dense deposit of lime salts was, to all purposes, petrified. The sound of the pieces striking together was altogether stony. Its effect on the edge of curettes and drills was like stone. A close examination of the tumor shows an apparent pedicle which must have come from the situation near the posterior part of the cribriform plate of the ethmoid. The large vascular spaces on the cortex of the tumor would indicate that at one time it had a highly vascular covering. Dr. Lavender's examination of a small portion of the cortex shows true bone and cartilage cells and deposits of lime salts. These are all arranged chaotically without Haversian systems.

In conclusion I would say that the subsequent showing of that attachment of the tumor to the cribriform plate of the ethmoid, its extension to which region was only suspected at the time of removal, proves the necessity of the technic adopted—the plane of the chiseling being always in directions parallel to the cribriform plate. In the septic condition of the nose any break in the dura would probably have proved fatal.

QUININ AND IRON IN PNEUMONIA.

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GENEVA, N. Y.

The satisfactory results noted in my previous report[1] of pneumonia cases treated by quinin and iron have continued. My experience with this method is limited to 15 cases. The only fatal case was that of a pronounced alcoholic who had been suffering for months with an active tuberculous process in both lungs. He had been unable to work for two months prior to the attack of pneumonia. In this case the treatment exerted a beneficial influence on the circulation. The patient was nearly pulseless on the second day of the disease before instituting treatment. After administering the quinin and iron a good pulse was maintained for five days. In response to requests which are being made for more information concerning the quinin and iron treatment of pneumonia, I submit the following report of a recent case:

Patient.—J. McC., aged 30, maltster.

History.—The patient had never been ill with the exception of typhoid fever six years ago. He is an alcoholic and had been on a debauch when taken ill. He had been troubled with a slight cold for a few days when his illness began, April 19, 1906.

Examination.—April 19, 5 p. m., temperature was 103; pulse, 130; respiration, 35. Percussion and auscultation indicated congestion of the lower lobe of the left lung. The man complained of headache and severe pain in the left side.

Treatment.—He was given a saline purge, followed one hour later by quinin sulphate gr. xxx. I tried to give him a larger dose of quinin, but he was attempting to vomit so frequently that I desisted. Tincture of chlorid of iron was ordered to be given every three hours in 10-drop doses.

Course of the Disease.—On April 20, at 9 a. m., temperature was 98.6; pulse, 90; respiration, 28. The patient was very comfortable and said that he had no pain. He was given quinin, gr. vi every four hours; the iron was continued.

April 21: The patient felt so well that he got up early and went down street, where he remained all day. He drank three glasses of ale, but no whisky. At 5 p. m. he was taken with a severe chill and pain in the left side. He had much difficulty in walking home.

At 6 p. m. his temperature was 105.2; pulse, 130; respiration, 45. Percussion and auscultation showed consolidation of lower lobe of left lung. Subcrepitant râles were heard over this area. The patient coughed at times, raised typical pneumonic sputum, and was delirious.

A diagnosis of pneumonia was made.

Treatment.—At 6 p. m. he was given quinin sulphate, gr. lv, and one hour later gr. xx. At 8 p. m. 10 drops of tincture of chlorid of iron were ordered to be given and the dose repeated every two hours. At 10:30 p. m. his temperature was 103.5; pulse, 130; respiration, 38. There was profuse sweating. The patient was very delirious and tried to get out of bed. He was given triple bromids, gr. xv.

At 11:30 p. m. his temperature was 101; pulse, 105; respiration, 32. He was quiet and said that he had no pain. He slept the remainder of the night.

April 22: At 9 a. m. his temperature was 98.4; pulse, 68; respiration, 28. He continued to raise pneumonic sputum. There was no pain and he felt fine. I ordered quinin, gr. vi, every four hours and the iron was ordered continued.

April 23, 24, 25: During this time his temperature was always slightly subnormal. The pulse ranged from 60 to 72. He felt fine and would sit up if allowed. He continued to raise rusty sputum. During this time he was given quinin, gr. vi, three times a day, and the iron was administered every four hours.

April 26: The patient sat up, pulse and temperature were normal, and he was discharged.

REMARKS.

The diagnosis in this case can not be questioned. Those who have never used the Galbraith method may doubt that the treatment had any effect on the course of the disease. Those who are familiar with it have learned to expect similar results in nearly every case. The results obtained in this case are the rule and not the exception.

I have carefully observed the effects of this treatment on the pulse, circulation, temperature, pain, crisis and duration of the disease, and I find that the results correspond exactly with those obtained by Drs. Galbraith and Gustetter. In almost every case I have felt like calling in my colleagues to see how comfortable my pneumonia patients are without ice-bags, mud poultices or opiates. My experience is too limited to draw conclusions as to the mortality, but I am confident that this method will prove very satisfactory in this respect.

I have reason to have great faith in the value of antitoxin—having treated 21 cases of diphtheria without any mortality—but I can state truthfully that I have never seen such marvelous results from the use of antitoxin in diphtheria as I have obtained from the use of quinin and iron in pneumonia. The statements which we have been taught to believe, that pneumonia can neither be aborted nor cut short by any known means, and that we have no drugs which have any appreciable effect on the toxemia, are obsolete.

1. THE JOURNAL A. M. A., Nov. 18, 1905.

Overcrowding of Vienna Hospitals.—The *Wien. klin. Rundschau* quotes a local daily to the effect that a sick workingman tried to gain admittance to the various public hospitals in turn, but was constantly turned away for lack of room. In order to get into some hospital he reasoned that if he could get himself arrested he would then be given hospital treatment. He consequently stole a pair of shoes, was arrested, and in the jail was given the needed medical care and treatment. On his recovery he served a brief term for petty larceny.

A NEW RECTAL ENEMATOR.

DUDLEY ROBERTS, M.D.
BROOKLYN, N. Y.

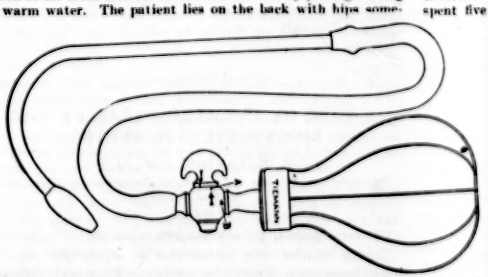
In the treatment of the different forms of chronic constipation no measure is so uniformly successful as the systematic injection of oil into the rectum. It may, indeed, be said that this method is indispensable in the cure of the spastic form of constipation. Since the elaborate study of this method of treatment by Fleiner and Kusmaul in 1892 it has gradually grown in favor.

There is, however, one serious objection to this method of cure; while patients realize its value they constantly complain that the taking of the oil is exceedingly annoying. By all the heretofore practised methods of injection there has been the bother of warming the oil and pouring it into the reservoir and the very trying experience of having the oil spill from the container or run from the rectal tube after its withdrawal from the anus. Now as success depends on the persistence with which this measure is kept up it is very essential that the procedure be simplified as much as possible, and that all unnecessary annoyance be eliminated. It is understood that as the oil is to be retained over night it must be injected by the patient himself at bedtime.

After a considerable experience with all methods of having the oil injected I have discarded them for the one here described. Patients who have had experience with the old apparatus characterize this new one as a great boon and well worth the additional cost.

The apparatus, as may be seen from the cut, consists in a curved rectal tube of hard rubber, the end of which is olivary shaped to make it self-retaining. This tube is made curved so that it comes up in front of the pubis; to this end is attached a 10-ounce Politzer bag, the connecting soft rubber tube being of a convenient length for the patient. The rectal tube is made with such a curve that it is readily passed from the front of the body to the anal opening; here by a slight traction movement it enters the anus in the proper direction, pointing toward the umbilicus. It has been demonstrated that this new form of tube is much less awkwardly introduced than by reaching around behind the buttocks. The Politzer bag is fitted with a stopcock having a small hole in one side, which permits the bag to fill with air when the cock is closed.

The method of taking the injection is simple; the bag is allowed to fill itself and the oil is then warmed by placing the bag in warm water. The patient lies on the back with hips somewhat elevated and introduces the rectal tube with soft rubber tubing attached. The bag is then attached and the stopcock turned to permit the oil to be slowly forced into the rectum. The bag being emptied, the stopcock is turned and air dilates it so that all oil may be forced from the tubing; by shutting off the stopcock we prevent the return of any oil into the tube and obviate the danger of soiling the clothing and bedding.



This new rectal tube can be used for ordinary enemata if attached to a fountain bag, and experience with it will quickly demonstrate the great ease with which it can be introduced into the rectum.

84 Remsen Street.

AN IMPROVED STOMACH TUBE.

RICHARD F. CHASE, M.D.
BOSTON.

The apparatus shown by cut consists of (1) an Ewald stomach tube proper, 30 inches long, marked at 22 inches from its distal end with a white band; (2) an adjustable saliva shield, to prevent saliva from flowing down tube; (3) a glass connector, and (4) a 30-inch connecting tube, to which is attached a strong valveless bulb of 3 ounces or 90 c.c. capacity.

Some of the advantages of the apparatus are as follows: (1) Aspiration or expression of gastric contents; (2) lavage or douching of stomach, and (3) inflation of the stomach may be done without making a connection or disconnection of apparatus and without the use of a stop-cock or shut-off. The efficient bulb enables one to evacuate the stomach contents

quickly and thoroughly as is required in poisoning. The apparatus will be found most convenient for self lavage, requiring no assistant. By substituting a "Rosenheim" douching tube the stomach may be douched as recommended by Rosenheim, the late Riegel and others. By using the 30-inch colon tube in place of stomach tube proper, the colon may be inflated for diagnostic and therapeutic purposes and rectal injections and high enemata may be given.

The apparatus has thus far acquired only a local reputation, but since it was seen in use during the recent Boston session, it has gone to many distant states and abroad. I naturally desire that it shall prove a success and for this reason have some suggestions to offer. The first is an important caution: Do not use the tube on a patient until you have spent five minutes in mastering its simple mechanism. Take a basin of water and follow explicitly the directions on box cover.

Inability to evacuate gastric contents may result from (a) plugging of eyes of tube; the injection of one bulb of air will clear eyes; (b) tube being introduced too far or not far enough; withdraw tube a little or introduce further; (c) stomach in some conditions being empty one hour after an Ewald test breakfast, in such case tube should be passed in from 30 to 50 minutes after breakfast. In cases of gastroptosis it is often necessary to introduce tube twenty-four or twenty-eight inches. The white band on tube shows only average distance of introduction in normal cases. Failure to appreciate these points has at times led physicians to condemn this and other apparatus, when there was no fault with the apparatus. Lavage or douching is done with the apparatus by injecting fluid into the stomach with the bulb; five or six bulbfuls (15-18 ounces) is enough to inject at one time. The fluid is allowed to siphon out of stomach in the usual way; suction, induced with the bulb, hastens the return flow.

Inflation of the stomach or colon becomes a very simple process with this apparatus; after cavity is distended, the air is retained by simply pinching tube; it may be allowed to escape at any desired moment. No assistant is required in any of the above procedures.

419 Boylston Street.

HEMATOMA OF THE NEW BORN.*

THERESA BANNAN, M.D.
SYRACUSE, N. Y.

CASE 1.—T. P. was born Aug. 20, 1893, at Hospital of the Good Shepherd; weight 4½ lbs. The mother was a primipara, labor was uneventful.

History—On the second day jaundice occurred. On the same day a swelling appeared over the right parietal bone, followed soon by a similar tumor over the left parietal. Both increased in size and were limited and separated by the parietal suture until the fifth day.

Dr. John Van Duyn photographed the child and aspirated the tumors, finding blood. The jaundice deepened, the stool became green, child grew weaker, and died on the ninth day.

Autopsy.—Postmortem by Dr. Van Duyn showed infant very thin and yellow; the internal organs were normal. The tumors were beneath the pericranium and contained about six ounces of fluid clotted blood (Fig. 1).

CASE 2.—T. K. was born March 17, 1906; weight 9 lbs.

History.—The labor, in a primipara, was characterized by short pains, some delay at the inferior strait, and scanty amniotic fluid. The pelvis was large and roomy, the soft parts distensible. The cord was around the neck and there was some asphyxia neonatorum. The child's body was long and thin, and the head of the average size. On the second day a swelling appeared over the right parietal bone, and on the third day a similar swelling occurred over the occipital. Both increased in size and were separated from each other by a narrow strip at the suture, until the fifth day. The parietal tumor, which was the larger, covered the greater part of the parietal bone and rose 1½ inches or more above the surrounding level. It was ovoid, limited in the median line by the suture. The occipital tumor was circular and it seemed as if the two must coalesce. The baby was slightly yellow for two or three days, but seemed otherwise perfectly well and nursed and cried with vigor. The occipital swelling receded rapidly, the parietal more slowly.

Fig. 1.—Infant in Case 1, 5 days' old.

When the child was one month old the tumors were as they appear in Figure 2; one was nearly gone, the other was much reduced in size.

It was assumed that these tumors contained blood because of their characteristic appearance. They were smooth, tense, fluctuating, sharply outlined, limited by the sutures, unaffected by change of position and with the base as extensive as the greatest circumference, apparently painless, and occurring after birth. They are free from the scalp which they lift almost at right angles to the skull. The circumference of the base of these tumors feels like an edge of bone marking an opening in the skull beneath the tumor mass. At birth, however, if the child's head had been examined and found normal the evidence is contradictory. So, too, when the tumor gradually increasing in size changes its circumference

Fig. 2.—Infant in Case 2, aged 1 month.

there is a sensation of an opening in the skull, where a few hours before was palpable bone.

The cause of these tumors might be interesting if known. Theoretically, pressure during labor or by the forceps might be the cause. In practice, however, severe labors and instrumental deliveries are not as a rule followed by hematomata. No treatment except hygienic seems indicated.

503 Warren Street.

* Read before the Syracuse Academy of Medicine, April 17, 1906.

A CASE OF ISOLATED PALSY OF THE RIGHT EXTERNAL RECTUS.

E. N. LAYTON, A.M., M.D.
Instructor in Clinical Neurology in Northwestern University Medical School.
CHICAGO.

Patient.—Mrs. J. R., a house-wife, aged 25.

Family History.—Her father died at about fifty years of age of some acute illness; her mother is living and well, and is about 56 years old; two brothers and one sister are living and well. There is no hereditary taint.

Previous History.—The patient had cervical adenitis when a child, the glands broke down and opened spontaneously, and healed with considerable scarring, but quite promptly. She has had what she describes as "sick headaches" all her life. The pain is of sudden onset, is neuralgic in character, located over the left temple, left side of forehead and extending through the left eye and ear; the teeth and face are not involved. The attacks come on irregularly every two or three weeks and last from one to three days. During one of these seizures the patient is completely prostrated, is weak, dizzy and unable to hold up her head. Nausea always accompanies

an attack and vomiting frequently occurs. For two or three days after such an attack she is weak, tired and drowsy. From this time until the onset of another "spell" she is entirely free from pain and enjoys the best of health. These attacks are, of course, typical of migraine, although there is none to be found in any other of her family or relatives.

Recently she had an attack of grip, from which she believes she has recovered, although she feels a good deal "run down."

Her menstrual history is negative; the periods began at fourteen years, are of the twenty-eight-day type, moderate in amount and never very painful. She has one child nine months old, born spontaneously at term and at present quite hearty and well. There have been no abortions or premature labors. No venereal infection is acknowledged. Her bowels were always regular until her pregnancy, but have been slightly constipated since.

Present Illness.—The onset occurred while she was still feeling very poorly after the rather severe attack of influenza from which she was just recovering, and while suffering from one of her periodic headaches. The patient was walking along the street when she became aware that her vision was not so acute as usual; then she began to have difficulty in passing the people whom she met and several times collided with them and with lamp-posts and buildings. She then noticed that she was "seeing double," and came to my office greatly agitated, believing she was about to become blind. There was no other subjective complaint, except a dull frontal headache, which she believed to be of the type ordinarily troubling her; she did not associate this pain with the eye trouble.

Examination.—This showed a robust, well-nourished young woman; the skin was cool and moist; pulse, 90, soft, full and regular; temperature 98.6°, respiration, 22; she appeared to be much wrought up mentally. Speech was normal, but showed evident excitement and concern.

Subjective Symptoms: There was dull pain over both eyes, being a little worse on the left side, as is usual in her migrainous attacks. Vision was not acute, and she found that she could see very much better with the left eye alone than with the right alone, or with both eyes; also that with both eyes open, she could see much better by turning the head far to the right.

Objective Sensation: This was undisturbed (tactile, pain, temperature, stereognosis, muscle-sense.)

Gait: The gait was a little uncertain with both eyes open, and she said that she was afraid all the time of bumping against something. There was no staggering, no rigidity, spasticity or ataxia.

Reflexes: The reflexes were all normal and equal; there was no Babinski or Gordon reflex and no ankle-clonus.

Tremor: A tremor of the protruded fingers was apparent, rapid and coarse in character. (This was never present in subsequent examinations and was due to her excitement). The tongue, lips and eyelids were negative as to tremor.

Coördination: Coördination (as in touching tip of nose with extended index finger; approximating tips of fingers, etc.) was normal. She was unable to execute any very fine movements, such as threading a needle, cutting accurately with the shears, etc. The sphincters were not disturbed.

Special senses: The hearing was normally acute; taste and smell were unaffected.

Eyes: The left eye was normal in vision, field and movements. There was no ptosis and both lids followed their globes freely and normally.

The right eye showed a convergent squint entirely independent of the left eye. She could turn the right eye normally to the nasal side and was then able to abduct it through only about 30°; movements up and down were free and normal in extent. Vision was 20/60 and very easily fatigued.

The two pupils were of equal size and reacted normally to light and accommodation. There was no nystagmus; both fundi were normal. The distribution of the fifth nerve was not involved, there was no facial asymmetry.

Mentality: The mental state was normal; memory, consciousness and sleep were natural and undisturbed; there were no hallucinations or delusions.

Diagnosis.—The clinical diagnosis is, therefore, an isolated paralysis, or strictly, a paresis, of the right sixth cranial nerve, the abducens, there being no involvement of either the third or fourth nerves.

The findings already detailed will serve to locate the causative lesion. To sum up, there was a paralysis of the right external rectus muscle alone; no involvement of the other recti, the superior oblique or of the palpebral muscles, thus ruling out a lesion encroaching on the third or fourth nerve. The fundi and discs of both eyes were negative. If it were a central (cerebral) lesion, the distribution in the muscles and sensory terminals would be much more extensive. It was not located in the nucleus of the nerve affected, for in such a case the movement of the other eye to the nasal side is impaired. It was not located at the most common site of such lesions, namely at the sphenoidal fissure, for if that were the case, it would almost certainly have involved the inferior and possibly the superior division of the third, or even the fourth and the frontal and nasal branches of the fifth, all of which are in such intimate relation in this narrow passage. The lesion was, then, distal to the sphenoidal fissure and involved the sixth nerve alone—an isolated peripheral neuritis.

The pathologic process was probably a simple neuritis and peri-neuritis of rheumatic or influenzal origin, following the attack of general systemic influenza from which the patient suffered two weeks before the onset of the present trouble. Hemorrhage at this point is extremely rare, would have been much more gradual in its manifestation and, in all probability, would have involved the other related structures; there is no history of trauma and no history or evidence of arterial disease. A neoplasm would have caused very gradually increasing symptoms, among which pain would have been preeminent; the onset would have extended over months or years, and ultimately the related structures would have become involved. There is no evidence of present or past syphilitic infection; she is a total abstainer from alcoholics and temperate in all her habits.

Course of Illness.—The illness extended over nine weeks, from the onset until the recovery of normal visual and motor power in the affected eye. The improvement was steady and the recovery complete and there has been no hint of recurrence after eleven months. The general health of the patient is excellent, with the exception of an occasional paroxysm of the old pain in the head.

Treatment.—Fifteen-grain doses of potassium iodid every six hours for four days had no appreciable effect. To this was then added one-thirtieth grain of strychnia four times a day, and after ten days, when the condition was undoubtedly no longer progressive, a five to eight milliampere galvanic current was applied over the temporal and ocular regions. This was used on alternate days for fifteen minutes at a time throughout the remainder of the course of the disease. The patient experienced almost immediate benefit from this current and after the third application there was an appreciable increase in the power of abduction in the affected eye. During this same period, the fluid extract of cannabis indica was given in capsule, beginning with three minims and gradually increasing the dosage up to ten minims three times a day, for the migraine. The headaches were much improved and at the end of the treatment of the ocular palsy, the patient had been free from these prostrating attacks for six weeks. They have since recurred, in less degree, but are always promptly relieved by the cannabis indica. The patient was under my care for nine weeks, at the end of which time all movements of both eyes were normal and vision perfect, there being no pain or diplopia.

Remarks.—From a careful study of this case as here presented, I believe the diagnosis of paresis of the right external rectus oculi due to an isolated influenzal neuritis of the right abducens, peripheral to the sphenoidal fissure, is clearly justified, and is so infrequent in clinical experience and the literature as to merit such extended notice.

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[For other information see second page following reading matter.]

SATURDAY, JULY 28, 1906.

OCCURRENCE AND SIGNIFICANCE OF EXTRADURAL BLOOD CLOT IN BURNED BODIES.

Burned bodies often present serious problems the solution of which is beset with great difficulties. In the case of a burned human body the medicolegal examiner may be called on to determine whether death was due to burns or whether the burns occurred after death and, in the latter instance, whether death resulted from natural or unnatural causes. It is not proposed at this time to discuss these questions in their larger aspects, but merely to call attention to the occasional occurrence in burned bodies of extradural blood clot, an occurrence that has attracted notice only of recent years. So long ago as 1860 Hölder first described extradural extravasations of blood in two burned bodies and ascribed them to postmortem processes, but his observations seem to have escaped notice completely. In 1882 Zillner[1] observed a mass of clotted blood over each convexity in a man whose body had been largely consumed by fire (Ring Theater disaster in Vienna in 1881); there were no recognizable traumatic fractures of the skull, the top of the cranium being bared of soft parts. Zillner cited this case as an example of the possibility of recognizing fatal lesions in extensively burned bodies.

More recent observations by Littlejohn,[2] Haberda,[3] Strassmann,[4] Harbitz[5] and others indicate, however, that accumulations of blood outside the dura may occur in burned bodies without violence and as part of the results of the action of heat on the head. In one of Strassmann's cases the soft coverings of the frontal regions were destroyed completely so that the bones were bared; there were no fractures of the skull, but inside the burned area was found, on the dura, a hard, deep red mass of blood surrounded by melted fat. The brain was peculiarly hard. In Littlejohn's case the left side of the head and face were burned extensively and the cranium exposed over an area about two inches in diameter; this part of the bone was dry, and inside was a large clump of brownish blood surrounded by lighter brownish, fatty masses. Both he and Strassmann, as well as Haberda, conclude that the extradural accumulation of blood in the cases seen by them was the result of postmortem changes due to the localized action of heat driving the blood and fat out of the exposed part of the cranium. In Harbitz's case the occurrence of all kinds of violence before, as well as during and after, the burning could be excluded, and he does not hesitate to ascribe the so-called hematoma to the action of the heat. Here also the blood was mixed with fat and the blood had accumulated under the parts most exposed to heat. It may be stated that spontaneous extradural hemorrhages are extremely rare, if such occur at all. Harbitz succeeded in showing experimentally that the application of heat for some time to circumscribed parts of the cranium of dead bodies resulted in an accumulation of blood and fat on the dura, but not nearly to such an extent as in the cases mentioned in the foregoing. He, therefore, doubts whether these accumulations are altogether of postmortem origin and suggests that they may be vital or agonal, the result of a beginning inflammatory hyperemia with hemorrhagic exudation mixed with blood and fat driven out of the bone by the heat. At all events, he holds that the accumulations result from the action of the flames.

These observations are of great practical significance. The literature is not without instances of the kind here described that have been interpreted as traumatic extradural hemorrhages. Every case of extradural accumulations of blood in a burned body must be considered by itself from all points of view, but it is essential that the possibility of such accumulation being the result purely of the action of heat be not left out of serious consideration.

1. Vierteljahrschr. f. gerichtl. Med., 1882, vol. xxxvi, p. 70.
2. Edinburgh Med. Jour., 1899, v, p. 473.
3. Friedreich's Blätter f. gerichtl. Med., 1900.
4. Quoted by Haberda.
5. Norsk Mag. f. Laegevidensk., 1906, lxvii, 521.

COMPARATIVE FREQUENCY OF DISEASES HERE AND ABROAD.

A few years ago it was the custom to think that a certain number of diseases which are rather common in Europe occurred much more rarely in this country. Such views even crept into the text-books and became the standard teaching to such an extent that most of us have come to accept them as supposedly founded on careful observation. With the progress of time and more critical sifting of medical literature and statistics, most of these nosologic differences supposed to be in favor of this country have proved to be unfounded. For instance, there was a very general impression in this country that gout was extremely rare in America as compared to its prevalence in England. When gout was suspected here great care was exercised in trying to trace it to hereditary origin in some English ancestor, and in many minds the final diagnosis was often considered dubious unless this element could be found in the history. The statistics of Johns Hopkins Hospital, however, kept carefully for fifteen years, show that gout is not nearly so rare in the United States as has been thought, that as a matter of fact for every four cases of gout admitted to St. Bartholomew's Hospital in London (due allowance being made for the comparative

number of patients in both hospitals) three were admitted to Johns Hopkins. There is only 25 per cent. less gout in Baltimore, then, than in London, and there is no special reason why Baltimore should have more cases than any other American city. Gout, in America as well as in England, is not inherited, but is the result of the life led, as a rule.

Some fifteen years ago nearly the same state of affairs existed with regard to diabetes mellitus. Pathologic glycosuria was considered to be much more rare here than in Europe. Careful investigation, however, shows that the number of sufferers from diabetes in the United States nearly equals that of other countries, and there seems to be little doubt that we have no reason for congratulating ourselves on the greater infrequency of this fatal affection among our population. It has been pointed out that especially the terminal stages of diabetes have been masquerading as other diseases and that this has reduced the supposed mortality from diabetes. Not a few diabetics develop a terminal tuberculosis because of the readiness with which tubercle bacilli, in imitation of their affinity for sugary solutions in the laboratory, grow luxuriantly in blood rich in sugar. Practically all sufferers from diabetes present some albumin and some casts in their urine besides the sugar, and as a consequence it is almost inevitable that if the sugar should be missed for any reason the patients will find their way into the mortality records as sufferers from Bright's disease.

A corresponding improvement in methods of observation seems to be about to eradicate another false impression with regard to the presumed American infrequency of the serious nervous disease—multiple sclerosis. While Strümpel declared not long since that multiple sclerosis is one of the commonest organic diseases of the nervous system and that among the country population of Germany it is decidedly more frequent than tabes, in this country it has been considered to be a very rare disease and only a few cases of it have been reported. In the last few years, however, this opinion has been changed and there seems to be no doubt now that a number of cases of multiple sclerosis have been missed in diagnosis in this country because too much emphasis has been laid on the necessity of certain cardinal symptoms being present if the diagnosis of this affection is to be definitely made. Dr. Joseph Collins, New York, has recently[1] pointed out that it is unlikely that our population is spared this affection to any such degree as our statistics would seem to indicate. Dr. E. W. Taylor, of Boston, after reviewing the American literature on the subject, takes the same stand.[2] He admits that there may be some fewer cases in this country than abroad, but the affection is by no means so rare as has been said.

If multiple sclerosis is really as frequent here as in Europe, then it is important that the medical practitioners of this country should learn to recognize it, not only in its typical forms, but also in such less well-developed types as still seem to authorities in nervous diseases to justify the diagnosis. While originally the three symptoms of scanning speech, nystagmus, and the so-called intention tremor, were considered necessary for the diagnosis of multiple sclerosis, it is now recognized that all of them may be absent throughout the entire course of the disease, and, as Dr. Taylor says: "If the diagnosis is not to be made without the presence of one or more of them, we shall certainly continue to overlook many cases in the future, as we have in the past."

1. THE JOURNAL A. M. A., June 2, 1906, p. 1721.
2. Journal of Nervous and Mental Diseases, June, 1906.

CYSTIC KIDNEY AND LIVER.

The explanations advanced to account for cystic kidney, by which is meant total polycystic transformation nearly always associated with great increase in size, may be divided into three sets, and we may speak of the retention theory, the cystadenoma theory, and the malformation theory of cystic kidney.

Virchow (1847) was the father of the retention theory, which assumes that the cysts arise as the result of obstruction to the outflow of urine from the kidney. Many varieties of possible forms of obstruction have been enumerated. Virchow first suggested uric acid deposits, but a little later he adopted the view that the obstruction was the result of a papillitis or pyelonephritis. At the present time the retention theory does not seem to find much favor with those that study the subject closely, and for various reasons, but more particularly because the structure of the cystic kidney is not simply that of a mass of retention cysts and because efforts to produce the condition experimentally by cauterization, etc., of the medullary papillæ in animals, have failed.

The cystadenoma theory dates from the year 1876, when Mihalkoviez suggested that "cystic degeneration of the kidney is analogous to cystic disease of the testicle, mammary gland and ovary." This theory has received strong support of recent years, especially because the anatomic conditions in cystic kidney have been found by competent investigators to indicate in some cases active epithelial proliferative changes with cyst formations. According to the advocates of this theory, it also explains equally well cystic kidney in the fetus or newborn and the adult, the differences in the two being mainly this, that in the adult the cysts have grown larger and secondary inflammatory changes have developed.

Numerous authors, whatever their view as to the mode of origin of cystic kidney, appear to favor the notion that cystic kidney in the adult in reality is congenital and may persist in a more or less latent state for many, many years. And there are certain considerations that speak in favor of this view, especially the close general

resemblance between the early and the late cystic kidney, which in both cases may be associated with cystic conditions in other organs.

Congenital cystic kidney is so frequently associated with malformations and with cystic conditions in the liver that the idea has occurred that the true explanation is to be found in developmental defect or error. Cystic liver has been found in from 19 (Luzatto) to 27 per cent. (Lejars) of cases of cystic kidney. Reque[1] recently reported the occurrence of cystic kidneys and liver in a middle-aged woman. Of more evident malformations (in the ordinary sense) described in cases of cystic kidney may be mentioned hydrocephalus, polydactylism, hare lip, hypospadias, atresia of the vagina, defects in the circulatory system, etc.—certainly an imposing list. Many suggestions have been made as to the probable nature of the developmental anomaly that is to account for the cyst formation; these, notwithstanding their interest, may be dismissed, however, with the statement that in no case are they based on anything like a demonstration of an actual observed anomaly. Recent studies by Bunting[2] and others indicate that the essence of the malformation, if so it can be called, may consist in an abnormal power of growth of duct epithelium, involving not only that of the renal ducts, but in some cases also that of the liver, even of the pancreas, and possibly also of the intestinal tract.

Another noteworthy feature of cystic kidney (and liver) is the tendency to occur in families. Bunting recently described congenital cystic kidneys and liver in two children of the same mother; in one of these the pancreas also was cystic to some extent. A number of cases are now recorded in which the disease has occurred in two generations of the same family, but the occurrence in two or more (four, even five) children of the same parents seems to be perhaps more common. There is consequently much to indicate that cystic kidneys and liver are more closely related to malformations than to tumors, in the narrow and accepted usage of the word, although it must be acknowledged that there is room for considerable discussion in regard to this point.

The feature of particular interest to physicians in connection with cystic disease of the kidney and other organs (and the reason for this discussion) is the marked hereditary and family tendency shown by the disease. Knowledge of this tendency may prove of value especially in diagnosis of cystic kidney in the adult in which the difficulty as well as the importance of correct diagnosis make every additional fact welcome. If greater attention is given this phase of cystic kidney and liver, much new, interesting and valuable material will accumulate that surely will throw further light on an obscure disease.

1. Medical News, July 29, 1905.
2. Jour. Exp. Med., 1906, viii, 271.

MIND AND MATTER.

There are two diametrically opposed views as to the relations between mind and matter, the one of which maintains that the former is merely a manifestation of the latter, depending on and terminating with it, and that aberrations of the one are to be sought in abnormalities in the other; while the other view contends that, although mind can not generate energy or force, it can cause matter to exert force on matter and thus can exercise guidance and control and prepare any sum of activity by arranging the position of existing material so as to produce results concordant with an idea or scheme or intention. One school holds that life has arisen from inorganic matter without antecedent life; the other, that life is neither matter nor energy, but something different and belonging to a different category. In the course of an address dealing with this subject Dr. T. Claye Shaw[1] proffers the suggestion that mind, consciousness, emotion, will, etc., may interact in a way akin to the *x*-rays or the unseen waves of wireless telegraphy. In his opinion, mind is not identical with life. The latter may exist in the absence of a nervous system, without which, however, there can be no manifestation of the former. So far as is known, a normal mind can show itself only through the body, and its manifestations can be made through no other material structure than the brain and the nervous system. The material of the brain and the nervous system necessarily implies mind, and it acts only by showing what are called mental processes. A nervous system is necessary to postulate mental phenomena. Mind is thus a necessary accompaniment of living nervous matter. The two arise together and are inseparable. Mind is not secondary to, but an essential part of, material, and the former can not exist without the latter, and when the material dies the mind must cease also. A disordered brain is practically a partially dead brain and it, therefore, can not show any true mind. The phenomena of diseases of the brain are manifestations of what is left of the sound tissue. The ravings and incoherences of the lunatic are not disease manifestations, but the unbalanced remnants of runaway tissue, true in themselves, but dangerous to the individual and to society, because the harness is broken and the guiding power inert.

THE PATHOLOGIC SIGNIFICANCE OF VASCULAR NEVI.

Vascular nevi of the port-wine type are not usually considered as of pathologic importance, however annoying their existence may be from an esthetic point of view. They are not, excepting in certain very marked cases, liable to malignant degeneration, and surgical measures are seldom sought except for cosmetic purposes. Their relation to certain nerve distributions, however, has been long noticed, though not always prominent, and Baerensprung's idea of their connection with conditions of the Gasserian ganglion when they are situated in the face has not apparently received general acceptance. Dr. Cushing's communication last week,[2] however, not only supports this theory—so far as the evidence he

1. British Medical Journal, June 9, 1906, p. 1335.
2. The Journal A. M. A., July 21, p. 178.

adduces goes—but also suggests a rather important pathologic significance of these anomalies. Three cases, of course, are not absolutely convincing, the less so when in only one of them could a thorough examination by autopsy be made, but they are enough so to incite interest in the subject and in the utilization of any further opportunities for investigation. If the occurrence of a facial nevus or angioma is a possible evidence of a similar condition in such a dangerous locality as the dura, such conditions would be looked on much more seriously than has hitherto been the case, and may afford important surgical indications in some cases of infantile convulsions and hemiplegia. Of course, it is only in case of such complication that such conditions are likely to be pathologically important.

Medical News

ALABAMA.

Fined for Not Reporting Births.—Dr. Thaddeus L. Robinson, Birmingham, pleaded guilty to the charge of having failed to turn in an obstetrical report for the month of May, and was fined $1.00.

Personal.—Dr. E. Marvin Mason, Marion, has been appointed a member of the staff of Johns Hopkins University, Baltimore.——Dr. William M. Price, Florence, was stricken with paralysis, but is improving.——Dr. William D. Fonville, Ensley, has been appointed assistant surgeon Alabama National Guard, and assigned to duty with the Third Infantry, vice Dr. Frank P. Pettey, resigned.——Dr. William M. Faulk has been elected mayor of Tuscaloosa.

ARKANSAS.

Hot Springs Drummers Dropped.—On July 13 the Secretary of the Interior, on recommendation of the local medical board, dropped from the register of physicians authorized to prescribe the waters of Hot Springs, the names of Drs. J. A. Flanders and M. T. Williams, charged with drumming for business, in violation of the regulations.

Site for New College.—Property on Lincoln avenue, Little Rock, now occupied by the Maddox Seminary for Young Ladies, has been transferred, for a consideration of $28,360, to a stock company for the purpose of establishing a medical college and hospital, to be known as the College of Physicians and Surgeons. The organization of this institution was noted in THE JOURNAL of July 21.

Personal.—Dr. Zaphney Orto has been elected president and Dr. William Crutcher secretary of the Pine Bluff Board of Health.——Dr. Harry C. King, Fort Smith, has been appointed local surgeon for the Midland Valley Railroad, vice Dr. Buchanan Hatchett, resigned.——Dr. W. P. Illing, Little Rock, physician of Pulaski County, has resigned in order to give his entire time and attention to the new college, hospital and training school for nurses.

CALIFORNIA.

Napa Exacts License.—The city council of Napa, on July 7, passed a license ordinance which provides that professional men, attorneys, physicians, dentists, architects, etc., hitherto exempt from taxation, shall hereafter pay a tax of $1.00 per month.

Change in Medical Course.—Dr. Arnold A. D'Ancona, dean of the University of California Medical Department, San Francisco, has arranged for the transfer from San Francisco to Berkeley of the medical instruction for the first two years. The departments of pathology, anatomy and physiology are those chiefly affected by this change.

Personal.—Dr. Reuben M. Bonar, Santa Rosa, has been commissioned assistant surgeon, N. G., California, with the rank of first lieutenant, and assigned to the Fifth Infantry.——Dr. Ida B. Parker has resigned as health officer of Orange.——Dr. Thomas B. W. Leland, San Francisco, was held up near his house, July 10, and robbed of $445 in currency and some valuable jewelry.——Dr. William Simpson has succeeded Dr. Frank H. Paterson on the San José Board of Health.

Graduating Exercises.—On June 14 a class of 28 was graduated from the College of Medicine of the University of Southern California, Los Angeles. The Right-Rev. Thomas J. Conaty delivered the doctorate address. Dr. Walter Lindley, dean of the college, presented the graduates to the president, Rev. George Findley Boyard, D.D., who conferred the degrees. In the evening the annual banquet was given by the faculty to the graduating class, over which Dr. George L. Cole presided as toastmaster.

Health Officers Organized.—On June 16 the San Joaquin Valley Sanitary Association was organized. The temporary officers elected were Dr. Newell K. Foster, Sacramento, secretary of the State Board of Health, president, and Dr. Oscar W. Steinwand, health officer of Selma, secretary. The following permanent officers were elected: President, Dr. William S. Fowler, Bakersfield; vice-president, Dr. Mary R. Butin, Madera; secretary, Dr. Oscar W. Steinwand, Selma; and treasurer, Dr. George L. Long, Fresno.

Hospital Notes.—The Long Beach Hospital is practically completed and ready to receive patients. The building was erected at a cost of more than $60,000.——The Columbia Hospital Association, San José, was incorporated June 29, with a capital stock of $200,000.——A new building is to be erected by the Seaside Hospital Company at Ocean Park, to accommodate 50 patients.——Sunset Hospital is to be erected on Angeleno Heights, Los Angeles. The building will be three stories in height, of fire-proof construction, and will cost about $200,000.

COLORADO.

Imprisoned and Fined.—George Elliott, Denver, who obtained, by fraud, license to practice medicine in Colorado, and who, it is reported, had engaged in questionable practices prior to that time in Chicago and Kansas City, whose history was given in THE JOURNAL of February 3, under the caption, "Medical Forgeries," has been sentenced to imprisonment for ten years, and in addition to pay a fine of $10,000 for using the mails to send medicines which are prohibited in regular practice.

Personal—Dr. P. Oliver Hanford, Colorado Springs, has been appointed representative of the Colorado State Board of Medical Examiners for El Paso County.——Dr. Hanford, City Physician of Colorado Springs, has also been selected to represent Colorado at the International Congress on Tuberculosis in New York, November 14.——Dr. S. Edwin Solly, Colorado Springs, who has been seriously ill, is reported to be much improved.——Dr. Tracey Love, Colorado Springs, was recently operated on for appendicitis at Englewood Hospital, Jersey Heights, N. J., and is reported to have suffered a relapse.

CONNECTICUT.

Hospital Fire.—The four-story building of the Amusement Hall of the State Hospital for the Insane, Middletown, was destroyed by fire June 21, the loss being estimated at $35,000.

Personal.—Dr. Thomas L. Mulcahy, police surgeon of Hartford, has gone to New York to take up the practice of the late Dr. William Mahon.——Dr. Robert Beck has been appointed medical examiner for the town of East Haven.

New Sanitarium.—The Elm Street Sanitarium of New Haven was incorporated July 8, with a capital stock of $100,000. Among the incorporators are Drs. Clarence F. Skinner, Henry L. Swain, Oliver T. Osborne and Norton R. Hotchkiss.

Communicable Diseases.—During June, 5 cases of smallpox were reported from 2 towns, 486 cases of measles from 55 towns, 99 cases of scarlet fever from 25 towns, 89 cases of diphtheria from 20 towns, 105 cases of whooping cough from 24 towns, 28 cases of typhoid fever from 16 towns, and 46 cases of consumption from 11 towns.

June Deaths.—During June there were 1,238 deaths reported in the state, 166 less than in May, 51 less than in June, 1905, but 157 more than the average number of deaths during June for the five years preceding. The death rate for the state was equivalent to an annual mortality of 15.1 per 1,000. Infectious diseases caused 186 deaths, or 15 per cent. of the total mortality; diseases of the nervous system caused 135 deaths; consumption, 113; heart disease, 107; accidents and violence, 94; pneumonia, 93; and diarrheal diseases, 88; measles, 22; diphtheria, 14; whooping cough, 11; cerebrospinal fever, 7; influenza and typhoid fever, 5 each; and scarlet fever and erysipelas, 3 each. No deaths from smallpox were reported.

DISTRICT OF COLUMBIA.

Typhoid Fever Record.—Typhoid fever shows an increase in the number of cases treated during the week and in the number of cases under treatment when compared with the previous week and with the corresponding week of 1905.

Assembly Hall for Hospital.—At the recent session of Congress, $75,000 was appropriated for the construction of an assembly hall at the Government Hospital for the Insane. The reservoir to be used as a receiving tank at the hospital is now nearly completed. It will have a capacity of 125,000 gallons. The population of the institution at present is 2,544, comprising 1,884 men and 660 women.

Crusade Against Typhoid.—The Health Department of Washington and the officers of the U. S. P. H. and M.-H. Service have joined in the crusade against typhoid fever. In addition to making analyses of all waters from public wells in the district, the chemists of the U. S. P. H. and M.-H. Service will aid the local health authorities in an exhaustive scrutiny of the existing cases of fever in an effort to determine whether the disease may be considered due to only given causes.

Mortality of the Week.—The mortality of Washington for the week ending July 14, was 141, a decrease of 42 from that of the previous week. Of the decedents, 75 were white and 66 colored, which is equivalent to an annual death rate per 1,000 among whites of 16.7, and among negroes of 35.6. The deaths among infants under one year of age was very high, 43 deaths in this period being recorded. Diarrheal diseases caused 31 deaths; consumption, 13 deaths; heart diseases, 14 deaths; diseases of the kidneys, 10 deaths; and typhoid fever and pneumonia, each 5 deaths.

Personal.—Dr. M. P. Sweeney, pathologist at the Washington Asylum, has been appointed interne at the Washington Asylum Hospital, vice Dr. Pargon, resigned.——Dr. Percy G. Smith has been named by the District Commissioners as superintendent for the Home for the Aged and Infirm, to be opened at the District farm at Shepherd's Landing.——Dr. James R. Wilder, Washington, has sailed for Europe.——Dr. George M. Kober has been nominated by the president to succeed Dr. H. Wells Woodward as a member of the District Board of Charities.——Dr. William F. Hemler has been appointed physician of the District Charity Bureau.——Dr. Edwin R. Lewis is reported to be seriously ill in Indianapolis.

FLORIDA.

New Sanitarium.—Dr. Robert L. Bryans, Pensacola, has recently purchased a large building overlooking the bay, which is due to be converted into a private sanitarium.

Personal.—Dr. Frank G. Thomason and family, Kissimmee, have gone to their new home at Houston, Texas.——Dr. George P. Henry has been reëlected mayor of De Funiak Springs.

Acquitted.—Dr. Hiram J. Hampton, Tampa, has been acquitted of the charge of manslaughter in causing the death of Mrs. J. W. Evans, Thomasville, Ga., by a lack of care in a surgical operation. This is a second trial, the first having resulted in conviction and a sentence of five years' imprisonment in the penitentiary.

State Association Meeting.—The Florida Medical Association will hold its annual session at Tampa, beginning the third Wednesday in April, 1907. At the conclusion of the session it is proposed to entertain the members and their families by an excursion to Cuban points of interest. The route will be from Tampa to Key West, thence to Havana, where time will be allowed for excursions to various points on the island, and on the return trip from Key West, stops will be made along the line of the East Coast Railway.

GEORGIA.

Typhoid Epidemic.—It is reported that there are fifty cases of typhoid fever in Greens Cut, a place of about 200 population, also that seven deaths have occurred in the last week.

Sanitarium for Waycross.—Drs. F. C. and G. P. Folks, Waycross, have decided to build a sanitarium, of which there is urgent need in that section. The building as planned will cost about $20,000.

Pasteur Institute.—The State Board of Health has passed a resolution for the establishment of a Pasteur Institute in Augusta. Money for establishing the institute will be taken from the funds appropriated by the legislature for this purpose.

College Prospects.—The dean of the faculty of the Medical College of Georgia, Augusta, announces that the college term has been lengthened to seven months. He also announces that one or two more professors will be added to the faculty of the college.

Personal.—Dr. Robert B. Barron, Macon, who underwent operation for appendicitis at Macon Hospital, is convalescent. ——Captain William C. Lyle, assistant surgeon Third Infantry, N. G., Georgia, has been commissioned major and surgeon of the same regiment.

Graduates Must Be Examined.—The House committee tabled the bill of Mr. Moore of Cherokee County, which allows graduates of incorporated medical colleges to practice without having passed an examination before the State Medical Board. The president of the board objected to the measure on the ground that it would lower the standard of the colleges.

ILLINOIS.

Diphtheria in Moline.—Five cases of diphtheria in one family are reported in Moline. The father of the family told the Health Commissioner that he was depending for treatment on divine healing and witch hazel.

Society Elects.—At the twenty-sixth annual meeting of the Crawford County Medical Society, held recently in Robinson, the following officers were elected: Dr. L. Roscoe Illye, Heathsville, president; Dr. James M. Mitchell, Oblong, vice-president; Dr. Herbert N. Rafferty, Robinson, secretary, (re-elected); Dr. Frank L. Dunham, Robinson, treasurer; and Drs. Charles H. Vorheis, Hustonville, Arthur G. Meserve, Robinson, and A. D. Midgett, Flat Rock, censors.

Deaths in Chicago.—During the week ended July 21, 517 deaths were reported, 19 more than for the preceding week, but 110 less than for the corresponding week in 1905. This death rate was equivalent to a mortality of 13.15 per 1,000. The more important death causes were acute intestinal diseases, 98; consumption, 56; violence, including suicide, 51; nephritis, 36; heart diseases, 33; and pneumonia, 31. Of the decedents, 148 were infants under one year, and 47 were between one and five years of age.

Newspaper Write-ups.—At a meeting of the Montgomery County Medical Society, June 14, a resolution was adopted censuring physicians who allowed reports of their cases to appear in the daily press. It was decided to keep a scrap book showing violations of this rule, the clippings to be read by the secretary of the society at each regular meeting, when the physicians in question would be allowed to make explanation.

Personal.—Dr. O. C. Willhite, the new superintendent of the Cook County Institutions, Dunning, has arrived and assumed charge.——Dr. Cyrus H. Cutter has been appointed official physician at the postoffice at Aurora.——Dr. Ira Frank, Chicago, was seriously injured July 21, in a collision between the motor car in which he was riding and an express wagon. He is now reported to be improving.——Dr. James L. Greene, the new superintendent of the Illinois Eastern Hospital for the Insane, arrived at Kankakee, July 21, and assumed charge July 23.——Dr. John MacKellar, formerly of Chicago, was seriously injured in an automobile accident at Manhattan, Nev. ——Dr. and Mrs. Fenton B. Turck and Dr. Hugh T. Patrick, Chicago, have returned from Europe.

INDIANA.

Typhoid in New Albany.—Typhoid is reported to be increasing in New Albany. In the cases reported patients have used water from ordinary wells.

Hailstorm Damages Hospital.—A severe hailstorm, July 13, caused damage to the extent of $25,000 to the Central Hospital for the Insane, Indianapolis.

Hospital Additions.—A permit has been issued for the erection of a four-story addition to the Deaconess' Hospital at Ohio street and Senate avenue, Indianapolis, to cost $22,000. This will provide twenty additional bedrooms and eight additional wards for the institution.

To Protect Water Supply.—The chief chemist of the State Board of Health has drawn a bill whereby the board is to have general oversight and care of all waters in the state, and is given authority to consult and advise with authorities of cities and towns or corporations, introducing or intending to introduce systems of water supply, drainage, or sewerage.

Personal.—Dr. T. Victor Keene, state bacteriologist, was operated on for appendicitis at the Eastern Hospital, Indianapolis, July 13.——Dr. William J. Purkhiser has been appointed Health Officer at Salem.——Dr. John M. Nickels, Sellersburg, was operated on for cancer of the liver and gall blad-

der, July 7.——Dr. Marcus H. Thomas has been appointed local surgeon at Huntington for the Fort Wayne Valley Traction Company.——Dr. Otis W. McQuown has been appointed secretary of the Marion Board of Health, to succeed Dr. Albert H. Combs, deceased.

June Diseases and Deaths.—The order of disease prevalence in June was as follows: Rheumatism, diarrhea, tonsillitis, bronchitis, intermittent and remittent fever, cholera morbus, typhoid fever, scarlet fever, whooping cough, cholera infantum, dysentery, measles, inflammation of the bowels, pneumonia, pleuritis, diphtheria, influenza, erysipelas, smallpox, typhomalarial fever, cerebrospinal meningitis and puerperal fever. Smallpox was reported from eight counties, 69 cases in all, with no deaths; typhoid fever from 137 counties, with 129 deaths. The deaths from tuberculosis were 315; pneumonia caused 111 deaths; violence 104 deaths, of which 35 were due to suicide and 5 to homicide. The total number of deaths during the month was 2,322, equivalent to an annual death rate of 10.6 per 1,000.

IOWA.

Diphtheria.—It is reported that there is an epidemic of diphtheria near Story City. Two deaths have occurred and twelve patients are under quarantine.

Gift to Hospital.—Peter Peterson, Sr., of Boone Township, Pottawattamie County, has made a contribution of $1,000 to the Jennie Edmonson Hospital, Council Bluffs.

Honors to President of State Board.—Dr. Robert E. Conniff, Sioux City, president of the State Board of Health, was the guest of honor at a dinner given to thirty-five local physicians at Dubuque, July 12, by Dr. D. R. Guthrie. On this occasion Dr. Conniff gave an address on the prevention of tuberculosis.

Health Officers Meet.—At the Iowa Health Officers' Association annual meeting, July 10, Dr. Cassius T. Lesa, Mount Ayr, was elected president; Dr. E. Warren Doolittle, Garden Grove, vice-president; and Dr. Nathan W. Getz, Marshalltown, secretary and treasurer. The next meeting will be held in Marshalltown.

State Board Affairs.—The State Board of Health elected at its caucus at Waterloo, July 14, Dr. Fred W. Powers, Waterloo, president, succeeding Dr. Robert E. Conniff, Sioux City. ——Dr. Joseph H. Sams, Clarion, was selected president of the State Board of Examiners.——Dr. Josiah F. Kennedy, Des Moines, who has been secretary for twenty-two consecutive years, tendered his resignation, to take effect Jan. 31, 1907.

Personal.—Dr. Charles F. Wahrer, of Fort Madison, has been elected president of the Tri-State Medical Society.——Dr. Edward M. Myers, Boone, has been appointed assistant surgeon and assigned to the Fifty-fifth Infantry, Iowa N. G.—— Dr. William B. La Force, Ottumwa, has been elected professor of gynecology and abdominal surgery in Keokuk Medical College, College of Physicians and Surgeons, and secretary of the faculty of the institution.—— Dr. William S. Osborn, at present assistant of the State Inebriate Hospital, Knoxville, has been selected by the State Board of Control to succeed Dr. Ole C. Willhite as superintendent.——Dr. Emmet T. Wickham, Washington, has resigned as Coroner of Washington County and has been succeeded by Dr. George W. Hay.

MISSOURI.

State Health Board Revokes Licenses.—The State Board of Health, at its meeting, July 10, revoked the licenses of Drs. E. H. Hogan, St. Louis, J. L. Fitzporter, St. Louis, H. C. McCall, Mexico, and Thomas Benton Hughes, St. Louis, on account of unprofessional and dishonorable conduct.

Pays Fine.—Dr. Conrad E. Thomas, St. Joseph, who was arrested on a warrant sworn out by the health officer, charged with failing to report a case of smallpox, paid a fine of $10 in the police court by agreement. Dr. Thomas claimed that the patient was ill, not with smallpox, but with contagious impetigo.

School Board Favors Inspection.—At the meeting of the St. Louis School Board, July 10, the board declared itself in favor of the bill now before the municipal assembly providing for medical inspection in the schools. The superintendent suggested that this be confined to inspection proper and should not contemplate the treatment of disease.

Alcoholic Patients at St. Louis City Hospital.—Dr. H. Wheeler Bond, Health Commissioner of St. Louis, has requested the chief of police to lock up all chronic alcoholic patients immediately on their release from the City Hospital and docket them for the police court on charges of drunkenness. The reason for this action is that the hospital is crowded, and many such patients return within a day or two after each release.

Health Board Reorganized.—At the meeting of the State Board of Health, July 10, Dr. Alfred B. Adcock, Warrensburg, was re-elected secretary to succeed himself; Dr. Ira W. Upshaw, St. Louis, was appointed a member of the board to succeed Dr. Mont M. Hamlin of that city, term expired; Dr. Albert H. Hamel, De Soto, was appointed to succeed Dr. Dempsey T. Powell, Thayer, and Dr. Robert H. Goodie, Hannibal, was elected president to succeed himself.

Pathologic Society Organization.—A society to further general interest in pathology was organized in St. Louis July 2. The society is to hold monthly meetings at which demonstrations of pathologic work will be made. The scope of the society is to be as general as possible, and all members of the regular profession will be invited to take part in its proceedings. Dr. Guthrie McConnell was elected president and Dr. George S. Drake, Jr., secretary and treasurer.

Legislation and Public Health.—The Committee on Legislation and Public Health of the Missouri State Medical Association, composed of Dr. Frank J. Lutz, St. Louis, chairman, Dr. Herman E. Pearse, Kansas City, and Dr. George Homan, St. Louis, held a called meeting at St. Louis, July 10, to hear suggestions from the county medical societies relative to the introduction of legislation regulating county poorhouses and medical practice. Forty-five counties were represented.

Hospital News.—The contract has been awarded for erecting a new hospital building on the state penitentiary grounds, Jefferson City, at a cost of $32,920.——An ordinance has been passed by the Kansas City Council appropriating $8,500 to construct an additional story on the east and west wings of the main building of the new general hospital.——The new Evangelical Deaconess Home and Hospital, St. Louis, erected at a cost of about $100,000, will shortly be ready for dedication. The institution will have accommodations for ninety patients.

NEW JERSEY.

Anthrax Present.—A serious epidemic of anthrax has broken out in several towns in the state. The epidemic is much worse than that present in the same locality two years ago, and more deaths have resulted than in any of the previous outbreaks.

Health Report.—In the report of the Health Department of Camden for the month ended July 15, a marked decrease is shown in the cases of contagious disease. In all there were only 31 cases, as follows: Typhoid fever, 4; scarlet fever, 9; diphtheria, 13; and tuberculosis, 5.

Personal.—Dr. George E. Sonnebornn, resident physician at St. Francis Hospital, Trenton, was prostrated by the heat, July 1, but soon recovered.——Dr. John W. Bennett, Long Branch, has been elected secretary of the State Board of Medical Examiners, to succeed Dr. E. L. B. Godfrey.——Dr. Alexander H. Small, Riverside, was thrown from his automobile June 15, and painfully injured.

Sanitarium Opening.—The Red Bank Sanitarium for Children was opened June 9, nearly 2,000 boys and girls from Philadelphia enjoying the benefits of the great pleasure ground. President George McCreary and Dr. J. Chester Moore made addresses.——By the will of the late Monroe Smith the sanitarium receives $50,000. The institution was founded by the testator's father, and provides a home and recreation ground for Philadelphia's sick and poor children.

Camden Water Supply.—According to the health report presented by the Board of Health Camden, with a population of 80,000, had only 25 cases of typhoid fever, with three deaths, last year. It is believed by the health officials that every one of the cases reported was contracted in Philadelphia by use of the polluted water served in that city, because it has been demonstrated that Camden's artesian well systems are absolutely free from typhoid bacilli. While using Delaware river water, Camden, with a much smaller population, had more typhoid fever cases each month than it now has in a year.

NEW YORK.

Gives Hospital.—Miss Adelaide Kenny Richmond has announced to the secretary of the board of directors of the Batavia Hospital Association that she would give to the association a hospital for the care of contagious diseases, to cost between $2,000 and $3,000, and to be known as the William Eugene Richmond Memorial Cottage.

Personal.—Dr. Frederick F. Hover, Tonawanda, has completed his sixty-seventh year of medical practice in that place.

——Dr. Frank M. Woolsey, Hancock, has been appointed local surgeon for the Erie railway.——Dr. John Van Duyn, Syracuse, was seriously injured July 13 in a collision between his automobile and a trolley car.——Dr. Milton C. Conner, Middletown, who was recently operated on for appendicitis in New York City, has returned home.——Dr. Charles F. Howard, Buffalo, has been re-elected president of the Reformatory Prison Commission.

Infant Mortality Lowered.—As a result of the work of Dr. George W. Goler in securing a pure milk supply, the death rate among infants in Rochester has been decreased 30 per cent. In the nine years from 1888 to 1896 there were 6,629 deaths of children under five years of age, while for the nine years from 1897 to 1905, during which milk stations have been in operation, there were only 4,403 deaths, although the population had increased by more than 50,000. It is believed that while other factors are responsible for this decrease, the chief cause is the improved milk supply. The plan here is to secure absolutely clean milk, without resorting to pasteurization or sterilization. By extreme care with all utensils, etc., the average bacterial count is less than 10,000 to the cubic centimeter, in milk sold at the milk stations for infant feeding. The health bureau insists on a standard of not more than 100,000 bacteria per cubic centimeter for the general supply. The milk of one dealer, on 105 consecutive bacterial counts, yielded an average of less than 4,000 bacteria to the cubic centimeter.

Counties Celebrate Centennials.—Broome County Medical Society celebrates its centennial this fall.——Cayuga County Medical Society observed its one-hundredth anniversary the last week in June.——Columbia County Medical Society celebrated its centennial May 8.——Greene County Medical Society held its midsummer meeting and centennial at the Catskill Mountain House July 10.——Herkimer County Medical Society held its one hundredth annual meeting March 6.——Madison County Medical Society celebrated its centennial in Oneida May 8.——The Oneida County Medical Society held its centennial meeting in Utica July 10.——Orange County Medical Society celebrated its centennial anniversary in Goshen July 2.——Onondaga County Medical Society celebrated the one hundredth anniversary of its organization in Syracuse May 8. The meeting was closed by a banquet at which 200 were present, and over which Dr. Ely Van de Warker presided as toastmaster.——Rensselaer County Medical Society celebrated its centennial February 22.——Ulster County Medical Society celebrated its centennial anniversary June 26.

New York City.

For Post-Graduate Hospital.—Mr. and Mrs. Edgar E. Brandon, Oxford, Ohio, have given $5,000 to the Post-Graduate Hospital as a memorial to their infant son.

Hospitals Benefit by Will.—In the will of the late Thomas S. Ryder, Manhattan, bequests of $1,000 each are made to St. Francis Hospital and to St. Vincent's Hospital.

Vanderbilt Clinic.—Plans for enlarging and improving the laboratory of the Vanderbilt Clinic of the College of Physicians and Surgeons of Columbia University have been filed. According to the new plans the size of the laboratory will be doubled.

Failure to Report Death.—Dr. Weston, a coroner's physician, has demanded explanation why a death that occurred in Bellevue in the alcoholic ward had not been reported, and warned the authorities of Bellevue against reporting deaths through the police instead of directly to the coroner's office.

Epidemic of Trachoma.—Dr. Lester of the New York Eye and Ear Infirmary said that despite the efforts of the Health Board to check the spread of this disease, at least one-third of the school children in the thickly populated districts in Manhattan, and 25 per cent. of those in Kings, were afflicted with trachoma.

Trolley Victims.—The Brooklyn Rapid Transit Company has submitted a report to the State Railroad Commissioners showing that there were 111 fatal accidents on the railroad during the year ended June 30, 13 passengers being included in this list. In 76 cases no liability on the part of the company existed. There was one fatal accident to each 4,000,000 passengers carried.

Contagious Diseases.—There were reported to the sanitary bureau for the week ended July 14, 392 cases of tuberculosis, with 163 deaths; 293 cases of measles, with 15 deaths; 224 cases of diphtheria, with 36 deaths; 86 cases of scarlet fever, with 10 deaths; 51 cases of typhoid fever, with 11 deaths; 45 cases of whooping cough, with 10 deaths; 7 cases of cerebrospinal meningitis, with 12 deaths; 31 cases of varicella and 2 cases of smallpox. A total of 1,131 cases, with 257 deaths.

Graphic Popular Teaching of Hygiene.—The Health Department is about to open a tuberculosis exhibition designed to instruct the masses in the prevention of tuberculosis and in the care of those afflicted with the disease. This exhibition consists of stereopticon views showing how the disease is contracted in poorly ventilated and dirty rooms, views of camps, etc. Between the "health" slides there will be popular scenes and songs. There will be four or five performances each week in parks and on recreation piers.

Fresh-Air Camp.—At Sixty-fifth street and East River John D. Rockefeller has established a fresh-air camp for sick babies. Five pavilions, 15 by 42 feet in dimension, with movable walls, constitute this camp. The camp is equipped to care for one hundred babies. Any sick baby under eighteen months of age is eligible. Mothers are instructed how to care for their infants, and this institution is being conducted partly as an experiment, with the purpose of demonstrating what can be done to keep down infant mortality.

Petition for Dissolution.—In the petition of a majority of the New York County Medical Association in the City of New York for a voluntary dissolution of said company, Justice P. H. Dugrow, of the Supreme Court of the State of New York, has ordered that persons interested in this corporation shall show cause before the Supreme Court at a special term to be held in New York City Sept 17, why said corporation should not be dissolved and why such petitioners should not have such other and further relief as the court may see fit.

Personal.—Dr. and Mrs. Walter F. Lambert sailed for Europe on the *Kroonland* July 7.——Dr. and Mrs. Albert G. Weed sailed for Glasgow on the *Astoria* July 7.——Dr. Elizabeth Jarrett sailed for London on the *Minnetonka* July 7.——Dr. and Mrs. Robert T. Wheeler sailed for Europe on the *König Albert* July 7.——Dr. Benjamin G. Strong, Long Island City, has resigned as Coroner's physician of Queens Borough.——Dr. William A. Griffith, Brooklyn, is reported to be seriously ill from scarlet fever in a hospital in Pittsburg, Pa.——Dr. James R. Sharp sailed on the *Batavia* for Hamburg, July 21.——Dr. A. Murray arrived on the *Princess Irene* on the 19th.

Pasteurize All Milk.—In spite of the safeguards thrown around the milk supply, the mortality among infants remains high. Figures recently presented in the monthly bulletin of the State Board of Health show that with a population of about one-half the commonwealth, New York City showed 76.2 per cent. of the total deaths of children between the ages of 1 and 5 years during May. Nathan Straus thinks the only remedy is to pasteurize all milk brought into the city, as a large number of these deaths are still due to infected milk. The death rates for the city and state for the month of May for the diseases most affecting infant mortality are as follows:

	Deaths in city.	Rest of state.
Measles	163	42
Diphtheria	216	62
Tuberculosis	793	435
Pneumonia	1,639	412
Diarrhea and digestive ailments	518	111
Totals	2,729	1,062

PENNSYLVANIA.

University Relief Fund.—The movement started by the University of Pennsylvania for the relief of university men who suffered by the earthquake in San Francisco has resulted in the raising of a fund of $8,500, which is now being distributed.

Society to Prevent Tuberculosis.—An association has been formed in Wilkesbarre to be known as the Wyoming Valley Society for the Prevention of Tuberculosis. A dispensary was opened July 13, in which a number of local physicians have volunteered to assist, and a trained nurse will be employed. The chief work will be to educate the people as to the means of prevention of the disease.

Philadelphia.

Vital Statistics for June.—The report of the division of vital statistics for June shows that 1,842 deaths and 2,622 births were reported during the month.

Hospital Report.—The report of the Mount Sinai Hospital shows that during the month of June, 39 patients were admitted to the hospital, that 69 patients were treated during the month, and that 26 remained in the institution July 1.

Typhus Fever in Philadelphia.—During last week one case of typhus fever—the first in 15 years—was reported in this city. The patient was a young man, a recent emigrant from Denmark. He died after a few days' illness in the Municipal Hospital.

Personal.—Dr. J. William White, who was operated on in Rochester, Minn., returned home July 20.——Dr. and Mrs. Henry W. Stelwagon sailed for Europe, July 13.——Dr. J. Norman Henry sailed for Europe July 18.——Drs. Charles P. Noble, Henry C. Register, George J. Callan and Joseph S. Gibb left for a tour of Europe July 19.——Dr. Judson Daland left on Saturday, July 14, for a trip to the Grand Canon.——Dr. Eliza F. Pettingill will sail the end of July for a short tour of Europe.——Dr. Harris A. Slocum sailed for Europe, July 11.

Physicians Pass Examinations.—The Civil Service Commission announces that the following have successfully passed examination: Dr. Leonard Frescoln, for assistant chief resident physician of the Philadelphia Hospital, at a salary of $900 a year; Dr. William W. Richardson, for assistant physician in the insane department; Dr. Louis Schwartz, for junior resident physician in the Municipal Hospital, and Drs. Rebecca Cornfeld, A. J. Cohen, William L. Clark, C. Hamilton Gray, G. Cooper Moore, and Maurice Goldberg, for outdoor physicians for the Bureau of Health.

Health Report.—The total number of deaths reported for the week reached 528. This is a decrease of 11 from the number reported last week and a decrease of 80 from the number reported in the corresponding week of last year. The principal causes of deaths were: Typhoid fever, 7; typhus fever, 1; pertussis, 14; diphtheria, 2; consumption, 46; cancer, 21; apoplexy, 13; heart disease, 49; acute respiratory disease, 20; enteritis, 121; hepatic cirrhosis, 5; appendicitis, 3; Bright's disease, 48; suicide, 3; accidents, 16; and marasmus, 12. There were 191 cases of contagious disease reported with 11 deaths, as compared with 128 cases and 19 deaths in the preceding week.

GENERAL.

Cholera Situation in Manila.—A decided improvement is reported in the cholera situation in Manila. The daily average of cases is said to have decreased at least one-half in Manila, and there is no further increase in the number of cases reported from the provinces.

Smallpox on the Isthmus.—It is reported from Colon that several cases of smallpox have occurred in that city. The disease is confined to the laboring class. The medical staff of the canal zone is isolating and disinfecting the affected districts and hopes soon to have the disease stamped out.

Correction on Discussion of Dr. Jack's Article.—In THE JOURNAL, July 21, page 169, third line of second paragraph, discussion of Dr. F. L. Jack's paper by Dr. Otto T. Freer, the words "removal of the orbital wall or floor of the frontal sinus" should be substituted for the words "removal of the orbit."

Leper Colony in the Philippines Moved.—According to cable reports, sixty lepers have been transported from the island of Cebu to the island of Culion, under the direction of Dr. Victor Heiser, chief quarantine officer for the islands. The quarters from which the lepers were taken were built by the United States troops several years ago, and were no longer commodious enough for the number to be accommodated.

Medical Association of the Southwest.—Committees from Missouri, Kansas, Arkansas and Oklahoma met at Kansas City, July 16, to consider the organization of the Medical Association of the Southwest. Twenty-five representatives from the above states were present. Dr. Frank J. Lutz, St. Louis, was chosen chairman and Dr. Fred H. Clark, El Reno, Okla., secretary. A committee was elected, composed of one member from each state, to draw up a constitution and by-laws. It is understood that this association is to work in conjunction with the American Medical Association, the first condition for membership being that each member must be a member of his state society.

CANADA.

Personal.—Dr. E. Herbert Adams, Toronto, has returned from a trip to China and Japan.——President Loudon, of Toronto University, has resigned and has been released. He was connected with the university for over forty years, and for the last fourteen years had been its president. His retiring allowance was fixed at the annual salary rate, namely, $5,600. ——Dr. C. J. Fagan, secretary of the British Columbia Board of Health, has inspected the salmon canneries of that province and has satisfied himself that the factories are sanitary and that they are conducted in a cleanly manner.——Dr. Laberge, the city health officer of Montreal, is advocating a federal system of food inspection for Canada.

CALIFORNIA RELIEF FUND.

The following contributions are acknowledged:

INDIVIDUAL CONTRIBUTIONS.

Physicians of Bucks County (Pa.), $28.00:

Carroll, John B., Hatboro	$5.00	Osborne, R. H. G., Morrisonville	$2.00
Crewitt, John A., Newton	1.00	Richards, J. N., Tullingston	3.00
Hannum, W., Hatboro	5.00	Walton, L. S., Jenkintown	5.00
Kearns, S. P., Philadelphia	2.00		
Myers, A. F., Blooming Glen	5.00		

SOCIETY CONTRIBUTIONS.

Columbus Academy of Medicine, Columbus, Ohio, $209.00:

Academy, Tbg	$50.00	Inglis, W. D.	$ 1.00
Baldwin, Hugh	1.00	Kinsell, D. R.	5.00
Baldwin, J. F.	50.00	McKitrick, L.	10.00
Barnhill, J. C.	5.00	Means, W. J.	5.00
Benkert, L. C.	2.00	Rector, J. M.	1.00
Carlton, J. S.	1.00	Richardson, W. W.	1.00
Clark, C. T.	10.00	Rodebaugh, H. A.	1.00
Cooper, Albert	3.00	Schauwerker, G. H.	2.00
Davis, W. C.	1.00	Shepard, C. J.	1.00
Dunham, J. D.	1.00	Smith, R. B.	1.00
Edmiston, W. E.	5.00	Stockton, George	1.00
Emerick, E. J.	5.00	Whitaker, H. W.	10.00
Evans, E. W.	3.00	Willard, G. W.	5.00
Gilliam, C. T.	2.00	Winders, Frank	10.00
Goodman, S. J.	1.00	Woodlin, W. J.	1.00
Hamilton, E. A.	3.00	Woodruff, L.	1.00
Hamilton, W. D. and C. S.	10.00		

Elk County Medical Society (Pa.)	$ 18.00
Grafton County Medical Society (N. H.)	5.00
King County Medical Society (Wash.)	204.00
Lycoming County Med. Society (Pa.)	50.00
Westmoreland County Med. Society (Pa.)	25.00
Total	$539.00
Previously acknowledged	$12,591.00
Grand total	$13,130.00

FOREIGN.

Cerebrospinal Meningitis in Glasgow.—Cases of cerebrospinal meningitis are still appearing in Glasgow, Scotland. The majority of cases are in the east end of the city. Most of the patients are under 10 years of age, and no patient who has been removed to a hospital has recovered, says the *Medical Press and Circular*.

Epidemic Cerebrospinal Meningitis in Germany.—The *Münch. med. Wochschr.* states that since the first of the year there have been 1,571 cases reported throughout the empire, with 700 deaths. In May 25 of the cases were in Posen, 110 in Silesia, 79 in Westphalia and 53 in the Rhine provinces, showing that the number of foci is increasing.

A Pathologic Society for Great Britain.—We learn from the *Medical Press and Circular* that a project is on foot to establish a pathologic society in Great Britain along the lines of the present anatomic society. It is not intended to conflict with any of the existing local societies, but is designed to form a bond of union between the pathologists scattered through England, Scotland and Ireland. It is intended that the meetings shall be held at stated intervals at different places, and the first meeting will be held at Manchester.

French Colonial Congress.—The section of medicine and hygiene at the recent Colonial Congress at Paris in June passed resolutions advocating the abolition of opium-smoking dens throughout the French colonies, also advocating the creation of a central institute for parasitology, human and animal, in all the colonies, with a sanitary police to take charge of epidemics and epizootics, and that the committees in charge of the erection of prisons should always have a representative of the medical profession among their members. Another resolution called for the appointment of a special commission to study beriberi. Brault reported nineteen cases of epithelioma in Arabs, and Jeanselme and Nicolle presented exhaustive studies of the pathology and medical organization of Siam and Tunis.

Hospital Ambulances for London.—London has no adequate and decent facilities for removing sick or injured persons to the hospital. Horse or motor ambulances are practically unknown, indeed the means for transporting individuals to a hospital are primitive to a high degree. The London county council recently brought in a bill to provide ambulances to take injured and sick persons to the hospital. This bill passed the house of commons, but has been thrown out by the house of lords. Sir William Collins, the introducer of the bill, stated in evidence that 70 per cent. of the cases taken to hospital are aggravated through removal by unfit and inappropriate means —such as shutters or deal boards. It seems almost incomprehensible that such a state of things should prevail in a city which is so progressive in many respects.

Improved Technic for taking Roentgen Pictures.—The *Berl. Klin. Wochschr.*, just received, contains some remarkably distinct Roentgen pictures of the knee. The bones stand out on patches of a much lighter background, inside the shadow of the soft parts. This surprising effect is obtained by the injection of oxygen into the joint before exposure to the rays. The oxygen does no harm and rather seems to relieve pain in the joint. It is generally absorbed in the course of a day or two, but in one instance it remained localized in the joint for a week. Hoffa, who writes the article, states that this method is now in current use in his clinic as a most welcome improvement in radiography. His assistant, Wollenberg, has devised a simple double tank, in which oxygen is generated from hydrogen dioxid, a tablet of potassium permanganate serving as the catalyzer.

Pozzi's Gold Book.—The Paris gynecologist, Prof. S. Pozzi, publisher and editor of the *Revue de Gynécologie*, recently completed the twentieth year of work in the Broca Hospital as gynecologist and surgeon. His friends and pupils celebrated the occasion by presenting him with a gold book, containing a series of articles on some phase of gynecology or abdominal surgery. They include some from the pen of Pinard, Delbet, Monprofit, Martin of Rouen, Treub of Amsterdam, Depages of Brussels and many others. A gold medal was presented at the same time, the design representing Science wresting a woman from the clutch of Death. The presentation took place on the morning of July 8 at the scene of his labors, and a number of his former pupils from France and abroad assisted in the proceedings. Pozzi visited this country a year or so ago as the official delegate to the Congress of French-speaking Physicians of America, and made many friends here. He is regarded as the pioneer in establishing gynecology as a special branch of medicine in France. He will be 60 years old October 3.

International Congress for Child Study and Care of Youth.—This congress, as already announced, is to convene at Berlin, October 1. A number of timely topics are to be discussed. Baginsky, of Berlin, will present the subject, "The Impressionability of the Child Under the Influence of Environment"; Neumann, of Königsberg, "Scientific Estimation of the Differences in the Capacities of Children and Their Practical Importance"; Ziehen, of Berlin, "The Normal and the Pathologic Association of Ideas in Children"; Binswanger, of Jena, "Hysteria in Children"; Heubner, of Berlin, "Occurrence of Idiocy in Private Practice," and Uffenheimer, of Munich, "Mimicry in Children." An exhibit of things connected with child life, hygiene and training will supplement the work of the congress. An exhibition of the first editions of works relating to the psychology of the child, from 1690 to 1882, is one of the features of the exhibit. Further particulars can be learned on application to the treasurer, Dr. M. Schäfer, Berlin N. W., 23 Klopstockstrasse. The *Münch. med. Wochschr.*, July 10, contains an extended notice of the congress.

Health Congress and Consumption.—The Royal Sanitary Institute of Great Britain recently held a health congress at Bristol. Mr. Arthur Richardson, M. P., read a paper on the "Rational Extension of Modern Cities." Mr. Richardson complained that the modern city is built up piecemeal. The result consists of large slum areas, dwelling houses side by side with industrial works; *bona fide* workingmen, in order to be near their employment, must gradually accommodate themselves to the tenement-house system. The efforts of reformers of the future, he said, must be of a two-fold nature—to prevent the influx of village laborers into the cities, and to secure for building purposes, big belts of land outside cities, but within reasonable distance of industrial works. A discussion took place as to the utility of establishing an experimental open-air colony in the country in which consumptive patients could be employed. Sir W. J. Collins, M. P., pointed out that war against tuberculosis, the white man's plague, is as yet but ineffectively waged, and declared that Professor Koch was right when he said that it is the overcrowded dwellings of the poor that we must regard as the real breeding places of tuberculosis.

From Russia.—Prof. A. Hippius writes from Moscow to the last *Deutsche med. Wochschr.*, describing the conditions prevailing there in what he calls the "present head-over-heels evolution of the country, which is scarcely to be distinguished from an actual revolution." He says that the official organ of the national medical association, known as the Pirogow Medical Association, recently issued an edition on red-tinted paper containing the names and the details of all the recent official arrests, imprisonments, banishments, etc., of medical men and women on account of political matters. There were 228 in February, 222 in March and 178 in April, a total of 628 cases in which physicians have either been killed or maltreated, arrested or banished. He states that the majority of Russian physicians are liberal in their views, but that some of them, and especially the younger set and almost all the rural medical officials and the Jewish physicians, are emphatically revolutionary. On account of the numerous arrests and banishments of medical men, and of the boycotting of certain localities by sympathetic physicians, there is a great scarcity of medical attendance in many regions. There are no applicants for the vacancies in medical posts officially announced in the papers. The lack of physicians was felt severely during the war with Japan, when so many were sent to the front, but the conditions in this respect are much worse now, and there are comparatively few medical students in the universities.

Asses' Serum in Treatment of Tuberculosis.—A series of experiments were reported at the meeting of the Paris Académie des Sciences, June 25, which have attracted considerable attention. Lannelongue, Achard and Gaillard have been working for seven or eight years to obtain an antitoxin which would protect guinea-pigs against tuberculosis. They believe that if it proves possible to protect guinea-pigs, the same technic might be applicable to man. The *Semaine Médicale* relates that in their latest experiments they had four lots of 30 guinea-pigs each. They were all injected with the same dose of virulent material, and then one lot was treated with serum from normal asses' blood, the second lot with serum from asses presumed to have been immunized against the disease, and another lot were injected with the same serum as a preventive. The mortality 371 days after the inoculation had been 90 per cent. in the controls, 87, 40 and 60 per cent., respectively, in the other lots. They claim that the curative and preventive action of the serum was thus clearly manifested. In another series of experiments, four lots of 50 guinea-pigs each were inoculated and were then injected with serum from a horse presumed to be antituberculous. After sixteen months and a half the mortality had been 78 per cent. for the controls, and 40, 55 and 48 per cent. in the other groups. After twenty months, the corresponding mortality was 97, 76, 72 and 73. The conclusions were strongly in favor of preventive and curative treatment with serum from immunized asses. Tests have been made with it in the clinic which they regard as very promising. They urge that the mortality curve in experimental tests is the most instructive point, although the fact that guinea-pigs are naturally short-lived must not be forgotten.

Mexican Typhus Fever.—The *Revista Med.*, xvii, 134, states that during one month recently 860 cases of "tabardillo," or typhus, were reported in Mexico, with 185 deaths. About 35 new foci were discovered. Dr. Ignacio Prieto, chief of the section of experimental pathology in the National Pathologic Institute, has succeeded in cultivating a streptococcus from the cerebrospinal fluid of typhus patients which he thinks may be the causal germ. It frequently assumes the aspect of a diplococcus. Inoculation of laboratory animals, according to the amounts injected, causes their speedy death or a lingering febrile affection which he believes to be identical with typhus. The Mexican government has authorized the purchase of monkeys for further experiments in this line, according to the daily papers, and has officially offered three prizes of $20,000 each for the actual discovery of the typhus germ, of its mode of transmission to man, and of a successful preventive or curative serum or effectual remedy. An appropriation of $10,000 has also been made to be distributed among the persons who aid the actual discoverers in their task. Competition for these prizes is open to the world, the final decision to be in the hands of the National Academy of Medicine. The address of the secretary of the academy for this year is Dr. D. J. G. Cosio, Ortega 9, Mexico. J. Terres, of Mexico, calls attention to the fact that the exacerbations of endemic tabardillo have invariably coincided, during the last twenty-seven years, with unusually dry seasons. When the rainy season was short and the rains less profuse the typhus endemics invariably flared up again. Another curious fact noted in connection with typhus in Mexico is that it is unknown below an altitude of 1,800 meters, while it is endemic in nearly every town above this altitude. Terres adds further that the disease is not transmitted by direct contact—at least he has never known of an instance in which this could be proved, although it is probable. He has frequently encountered cases in which the development of the disease followed close on some emotional shock lowering the resisting powers of the organism. One of Terres' patients was a physician, previously in good health and spirits until he was beaten by bandits one night. He was

not injured much, but was thoroughly frightened, and he developed symptoms of tabardillo the next day. Typhus in Mexico differs from European typhus in that the fever does not reach its maximum for three or four days. In most cases there is slight temperature the first evening, declining the next morning, but rising again toward night, first intermittent and then remittent, until it becomes continuous, thus differing materially from the temperature curve of European typhus. He remarks that malaria does not become transformed into tabardillo, and malaria rarely appears as a primary affection in Mexico. During the last seven years the mortality of tabardillo has ranged about 25 per cent. in January to its maximum of about 31 per cent. in April, May and June.

New Red Cross Pact at Geneva Conference.—The *Semaine Médicale* for July 11 devotes nearly eight pages to the report presented by Louis Renault in the name of the committee on revision of the existing regulations. He is professor in the Paris School of Law and was the minister plenipotentiary from France to the conference. The full text of the regulations recommended was accepted and signed by the representatives of the countries represented, thirty-five in all. The text of the new agreement is given in full. One of the thirty-three articles in it is to the effect that the contracting parties agree to take the necessary legislative steps to protect the use of the red cross on a white background, the distinctive sign of the sanitary service of the army, prohibiting its use to private individuals or societies, and especially its use as a trademark or for advertising purposes. The colors, red and white, are those of Switzerland, where the idea of international care of the sick and wounded had its birth. The prohibition of the use of the symbol by other parties goes into effect five years after the signing of the convention, but henceforth no new trademarks are to be granted allowing its use. The various governments also agree to enact or enforce measures repressing individual pillage of the sick and wounded of the armies, and to punish the misuse of the Red Cross sign and flag. When the sick or wounded have to be left behind by one of the belligerents, a portion of the sanitary personnel and material may be left to take care of them. The sick or wounded soldiers and officers are to be respected and cared for, without distinction of nationality, by the belligerent in whose power they are. The wounded thus falling into the hands of the other belligerent become prisoners of war, but certain special measures may be adopted in regard to them, either exchanging the wounded left on the battlefield or sending them home after recovery, or turning them over to a consenting neutral state, which agrees to take charge of them and hold them prisoners until the termination of hostilities. Each belligerent will transmit to the authorities of the other army or to their home government the marks or other means of identification found on the dead and the names of the sick and wounded taken into their charge. The belligerents will also inform each other reciprocally of the prisoners and changes, the entries into the hospitals and the deaths among the sick and wounded in their power. They will also collect all the articles of personal use or value, letters, etc., found on the battlefield or left by the sick or wounded dying in the sanitary establishments, and forward them, so that they can be sent to those interested, by the authorities of the home country. The military authorities can call on the charitable zeal of the inhabitants to care for the sick or wounded of the armies, under their supervision, granting to persons who respond to this appeal special protection and certain immunities. Voluntary aid societies may be assimilated with the regular Red Cross establishments if duly recognized and authorized by their respective governments, under condition that they submit to the military laws and regulations. Each state must inform the other of the names of the societies which it has authorized to render sanitary services under its guarantee to the belligerent parties. No society from a neutral country can serve one of the belligerents without the consent of its home government and the formal acceptance of its services by the belligerent involved. Before accepting its services the belligerent involved must notify the other belligerent of its intention. Persons belonging to the regular and to the volunteer societies are to continue their work if they fall into the hands of the enemy. When their services are no longer indispensable they shall be sent back to their army or country. Persons forming part of the regular sanitary service may take away with them their effects, instruments, arms and horses which are their private property. Persons connected with the regular sanitary service while working for the enemy small be remunerated according to the same rates as the corresponding personnel of the same grades in its army.

Association News

Minutes of Section on Diseases of Children.

In the official minutes of the sections published in THE JOURNAL, July 7, the proceedings of the Section on Diseases of Children, Friday morning, June 8, were omitted. They are as follows:

FRIDAY, JUNE 8—MORNING.

Dr. E. T. Shelley, Atchison, Kan., read a paper on "Superstition in Teratology." The paper was discussed by Drs. D. S. Hanson, Cleveland; George N. Acker, Washington; William T. Watson, Baltimore; G. W. Baker, Ogden, Utah; J. B. Learned, Northampton, Mass.; J. L. Morse, Boston; L. F. Bishop, New York; B. B. Simms, Talladega, Ala.; J. L. Morse, Boston, and E. T. Shelley.

Dr. Samuel Amberg, Baltimore, read a paper on "The Opsonic Content of the Blood of Infants."

Dr. Louis Faugères Bishop read a paper entitled "Constitutional Low Arterial Tension in Children." The paper was discussed by Drs. Arthur W. Fairbanks, Boston, Samuel M. Hamill, and L. F. Bishop.

"Value of Small Amounts of Human Milk in the Treatment of Infantile Atrophy and the Infections of Infants," was read by Dr. F. J. Denny, Brookline, Mass.

"The Wet-Nursing of Foundlings, a Pernicious Practice," was read by Dr. William T. Watson, Baltimore.

These two papers were discussed by Drs. S. M. Hamill, Philadelphia; W. L. Holt, Boston; H. McClanahan, Omaha; T. W. Kilmer, New York City; George N. Acker, Washington; I. A. Abt, Chicago; Thomas Morgan Rotch, Boston, and Drs. Denny and Watson.

"Some Unheeded Principles Involved in the Dietetic Management of Infants During Hot Weather," was read by Dr. Godfrey R. Pisek, New York. Discussed by Drs. R. W. Hastings, Brookline, Thomas Morgan Rotch, Arthur W. Fairbanks, and G. R. Pisek.

"Cerebral Palsies of Children," was read by Dr. William J. Butler, Chicago. Discussed by Dr. Thomas Morgan Rotch, Boston.

Dr. Rotch moved that a vote of thanks and appreciation be tendered the Chairman and Secretary by the Section for the marked success of the session. Seconded and carried.

Final adjournment.

Acknowledgement from Professor Trendelenburg.

LEIPSIC, July 7, 1906.

To the Secretary of the American Medical Association:—I thank you very much for kindly notifying me that the House of Delegates of the American Medical Association has elected me an honorary member of this great and illustrious scientific and professional organization. I fully appreciate the honor thereby conferred on me, and I ask you kindly to forward my best thanks to the President and to the members of the House of Delegates.

F. TRENDELENBURG.

Pharmacology

North Dakota to be Congratulated.

The people of North Dakota are to be congratulated on having not only a pure food law, but also officials who enforce it. Bulletin No. 69 of the North Dakota Agricultural Experiment Station, issue of June, 1906, contains analyses of many articles which have been found to be fraudulent or semi-fraudulent in character.

BIOPLASM.

One of the preparations reported on is Bioplasm, which was exposed in THE JOURNAL, Nov. 18 and Dec. 9, 1905. The North Dakota food commissioners analyzed this preparation and found that while the makers claim that it contains enzymes, "there was no indication of the presence of any of the digestive enzymes or ferments in any appreciable quantity, certainly not in sufficient quantity to produce any enzymic action." Their examination of the product showed it to contain "of nitrogen, 1.29 per cent., as against 13 per cent. claimed by the manufacturers. It was shown to contain of ash, 11.72 per cent., as against 7.72 per cent. claimed by the manufacturers. It was further shown that instead of containing a large amount of phosphoric acid in the ash as was indicated by the above claims, there was actually present 3.48 per cent. A further examination showed it to contain approximately 60 per cent. of sugar of milk."

The report goes on to state: "It can hardly be presumed, therefore, from the examination which has been made of this product that it is to be recommended as a cure in such divers complaints as are specified by the producers, namely, Bright's

disease, catarrh, cough, consumption, diabetes, locomotor ataxia, jaundice, goiter, hay fever, hysteria and scores of other troubles. As a result of our examination we should say that it was devoid of any of the virtues claimed for it by the manufacturers."

PRODUCTS CONTAINING ALCOHOL.

The law of North Dakota "requires that each and every product containing more than 5 per cent. of alcohol sold as a proprietary medicine, beverage, etc., shall be labeled to show the true per cent. of alcohol." The following products were examined, and the results we copy from the Bulletin referred to above:

PAINE'S CELERY COMPOUND.

Wells, Richardson & Co., Bellington, Vt.

	Per Cent.
Alcohol by volume	19.25
Alcohol by weight	15.63
Total solids	14.28
Ash	.81

DR. SHOOP'S RESTORATIVE.

Dr. C. I. Shoop, Racine, Wis.

Alcohol by volume	9.81
Alcohol by weight	7.89

SWIFT'S SPECIFIC, SSS BLOOD PURIFIER AND TONIC.

Swift's Specific Co., Atlanta, Ga.

Alcohol by volume	17.17
Alcohol by weight	13.92
Total solids	8.12
Ash	.16

DANDELION BITTERS, XXX BRAND.

Beggs Manufacturing Co., Chicago.

Alcohol by volume	28.62
Alcohol by weight	23.49

APPETITE BITTERS.

Geo. Benz & Sons, Minneapolis, Minn.

Alcohol by volume	36.95
Alcohol by weight	30.66
Total solids	6.85
Ash	.04

Sugar constitutes a considerable portion of the total solids in the above preparation.

HOSTETTER'S STOMACH BITTERS.

The Hostetter Co., Pittsburg, Pa.

Alcohol by volume	43.00
Alcohol by weight	36.03
Total solids	4.55
Ash	.006

The principal portion of the total solids in this product is sugar.

ELECTRIC BITTERS.

H. E. Bucklin & Co., Chicago.

Alcohol by volume	19.57
Alcohol by weight	15.89
Total solids	1.76
Ash	.08

This product contains little, if anything, of medicinal value aside from the alcohol.

MONARCH ROCK AND RYE.

J. D. Zien, Duluth, Minn.

Stated to be a powerful nervine and tonic.

Alcohol by volume	36.87
Alcohol by weight	30.59

The only constituent found present in any appreciable quantity in the form of solids was sugar.

BERLINER MAGEN BITTERS.

Berliner Magen Bitters Co., Duluth, Minn.

Alcohol by volume	23.22
Alcohol by weight	18.94
Total solids	8.52
Ash	.19

COLUMBIA STOMACH BITTERS.

Noyes Bros. & Cutler, St. Paul, Minn.

This product in appearance is much lighter than the ordinary whisky, indicating that it is largely neutral spirits.

Alcohol by volume	42.52
Alcohol by weight	35.60
Total solids	8.60
Ash	.04
Total sugar	7.75

The odor and taste indicate the presence of a slight amount of thoroughwort. This product can not properly be classed as anything other than an intoxicating beverage.

COOPER'S NEW DISCOVERY.

Alcohol by volume	12.00
Alcohol by weight	10.00

TOLU, CHERRY AND RYE, FOR COUGHS, COLDS AND CONSUMPTION.

Krales Medicine Co., Columbus, Ohio.

Alcohol by volume	30.00
Alcohol by weight	24.00
Total solids	3.03
Ash	.14

PERUNA.

Peruna Medicine Co., Columbus, Ohio.

Alcohol by volume	26.23
Alcohol by weight	21.96
Total solids	.35
Ash	.02

This product was not found to contain anything which you could properly class as medical in nature.

BLOOD AND CATARRH CURE.

Mederine Remedy Co., Duluth, Minn.

Alcohol	8.50

This product was found to contain alcohol and potassium iodid, and, therefore, would have to be labeled for presence and per cent. of alcohol and iodids.

COOPER'S NEW DISCOVERY.

Cooper Medicine Co., Dayton, Ohio.

Alcohol by volume	15.00
Alcohol by weight	12.13

SARSAPARILLA.

Webster Chemical Co., St. Paul, Minn.

Alcohol by volume	25.00
Alcohol by weight	20.43

The product contained potassium iodid in considerable quantity, also sarsaparilla and licorice.

HOOD'S SARSAPARILLA.

C. I. Hood & Co., Lowell, Mass.

Alcohol by volume	17.08
Alcohol by weight	13.84

This product also contains potassium iodid.

ELIXIR OF BITTER WINE.

Joseph Triner, Chicago.

Alcohol by volume	19.50
Alcohol by weight	15.84

The report states: "Each of the above products before being sold in North Dakota must be labeled to show the presence of alcohol and per cent. of the same, and where other products mentioned in Section 4, for example iodids, are present, the per cent. of these must also be shown on the label, otherwise, the products are not properly labeled and will be classed as illegal, and their sale in the state prohibited or the parties handling the same will be liable to prosecution under the drug law of the state."

BROMO-SELTZER.

The report also contains an analysis of bromo-seltzer, showing that it contains sodium chlorid, potassium bromid, sodium bicarbonate, citric acid, acetanilid, tartaric acid, and caffein.[1]

When the Emerson Drug Company of Baltimore were notified that their goods required labeling, they replied, the report states, substantially as follows:

"We have not solicited any orders for our product nor shipped any goods direct to the trade or within the borders of that state (North Dakota), nor have we done any advertising there, as we did not intend to comply with the law by publishing any part of our formula, consequently would not violate the law; therefore decided to withdraw our goods from that market, so if our goods are sold in North Dakota they are sold procured through some other source, and we are not responsible for it."

It would be interesting to know what the Emerson Drug Company will do when the National Pure Food law goes into effect; will they refuse to ship goods into any state, or will they comply with the law?

BROMO-CAFFEIN.

Keasbey and Mattison Co., Chicago.

The report states that on examination this product was found to contain caffein, a citrate, a tartrate, potassium bromid, and sodium carbonate. "It must, therefore, in order to be legal in the state, be labeled to show the per cent. of bromids present."

FRENCH'S CELERY CAFFEIN BROMID.

French Cave and Co., Philadelphia.

This product, the report states, was found to contain caffein, tartrates, citrates, bromids in considerable quantity, and sodium carbonate. Therefore it must be labeled in order to show the per cent. of bromids present.

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1. An analysis of this preparation was published in THE JOURNAL, Feb. 10, 1906, page 454, and was as follows:

Potassium bromid	10.53 parts
Acetanilid	4.58 parts
Caffein	1.20 parts

Assuming an average dose of the article—a teaspoonful—to weigh 76 grains (5.0 gm.), each dose would contain:

Potassium bromid	7 grains (0.5 gm.)
Acetanilid	3 grains (0.2 gm.)
Caffein	.8 grains (0.005 gm.)

BROMO-SODA.

William Warner and Co., Philadelphia.

The report states that an examination showed this product to contain caffein, tartrates, citrates, sodium bromid and sodium carbonate. "On notifying the company of the requirements under the law with regard to labeling for bromids, we were assured that the product is now being labeled to comply with the law and labels were furnished which show that each tablespoonful contains thirty grains of sodium bromid and one grain of caffein, which would comply with the requirements of the drug law of this state."

HAIR TONICS.

Various hair tonics were examined, among them Danderine, which was found to contain ethyl alcohol, by volume, 10.5. When the makers were notified that it must be labeled for the per cent. of alcohol which it contained, they replied:

"Replying to yours of the first, will say that under the ruling which you have made we must decline to ship any more goods to North Dakota."

The people of North Dakota are certainly to be congratulated on being so efficiently protected from frauds.

German Campaign Against "Patent Medicines."

Germany has for some time adopted the practice of publishing a kind of biannual black list of remedies, against the sale of which very severe restrictions were put, says the *British and Colonial Druggist*. This course has not been found satisfactory in the opinion of Count v. Posadowsky, the home secretary, who, according to the *Hamburger Nachrichten*, has a new plan of procedure under consideration. The list which, if the present system were maintained, would be published in October of the current year, is said to comprise no fewer than 600 new proprietary medicines. Against the regulations now in force two objections are cited, the possibility of a dealer escaping their effects by altering his production in name and composition before the issue of a new list, and secondly, the tendency which the publication of these lists creates of regarding them as indicative of what does and what does not constitute a "patent medicine." The new bill to be shortly laid before the Bundesrat is to strike at the trade by a special and easily applied legal process; "patent medicine" boards are to be founded, in which medicine, pharmacy and chemical industry will be represented, and before which the "patent-medicine" manufacturer will have the opportunity of appearing. These boards will apparently be given the duty of investigating the merits of each individual preparation. It is not stated who is to bear the cost.

Correspondence

The Country Doctor.

GREELEY, COLO., July 14, 1906.

To the Editor:—In THE JOURNAL, May 19, there appeared an article by Dr. John G. Wilson, Montrose, Pa., entitled "The Country Doctor," which attracts attention, first, on account of its title, second, on account of its brevity. Its title appealed to those of us who labor under this cognomen, and in warm weather brevity is the soul of interest as well as the soul of wit. As Dr. Wilson does not attempt to define the title "country doctor," or enumerate the country doctor's characteristics, it remains for those of us who have perused the article to decide if we are qualified to bear this honorable name. Unless we include in this category all who reside outside the limits of metropolitan cities and centers of learning, it is, perhaps, a rather difficult problem to draw a definite line of demarcation. Hospitals are found in many small towns and competent trained nurses are obtainable in practically all. The physician in the small town is as busy, on the whole, as his city brother and likely to see as many patients. Books, medical journals and office equipment are not difficult to secure in either location, and surely no one would presume to think that a private office or laboratory located in the tenth story is more conducive to mental astuteness than one overlooking the cabbage patch. Notwithstanding these facts, the man in the small town is justly entitled to the name, and it is of him we may conclude that Dr. Wilson speaks. If we turn briefly to the profession of any city with which we are familiar we will find therein physicians of all grades of ability. Not all rise to the standard of Osler or Kelly, nor do many sink to the depths of the "specialist recently of Paris and Vienna." In the ranks of the country practitioners the same discrepancy exists. We have at times a Sims or a Mayo, more frequently capable toilers in the ranks and rarely the aforementioned criminal operator.

Dr. Wilson's appeal is certainly well timed and breathes the gospel of hope to the country physician who is anxious to render the best service to his patients. Not that the country doctor should attempt work with which he is unfamiliar; rather he should familiarize himself with this work in order that his advice may be both safe and sane. Dr. Wilson's remarks may be criticised or neglected by many who have no aptitude, ability or desire to render better or more skilled service to those seeking advice. Others wise in their day and generation may give timely heed to the words of the prophet: "The ordinary physician must become more competent or cease to exist. No one physician can do the best possible work in all lines of modern medical practice, but he may do better work in every field and the best work in almost every instance." If he desires to enlist in this progressive class, and has the ability and application to support his wishes, "he must embrace the opportunities freely given by the masters of the profession at their clinics," and "he must be determined to improve himself at every opportunity."

CHARLES B. DYDE, M.D.

The Gelatin Method of Preserving Specimens.

BOSTON, July 16, 1906.

To the Editor:—The title page of "Pathology and Treatment of Glaucoma" by Priestley Smith, published by Churchill, London, 1891, states that the volume is a revised publication, with additions, of the Erasmus Wilson lectures, delivered at the Royal College of Surgeons of England, in March, 1889. This is interesting in view of the claims for priority as regards the gelatin method of preserving specimens in Prof. Watters' letter in THE JOURNAL, A. M. A., July 14, 1906. Smith's method may be briefly described somewhat as follows: Fixation by the bichromate method, freezing, bisecting and embedding in a glycerin or gelatin jelly, the latter being prepared by soaking gelatin in water (¼), melting, and after adding the white of an egg, boiling and filtering. Glycerin, 8 parts, and 60 drops of 10 per cent. carbolic acid is then added. At page 183 of this monograph it is stated in a footnote that: "The first suggestion of preserving specimens in glycerin jelly was published by Nettleship in 1871 (Royal London Ophthalmic Hospital Reports VIII, page 225)." In an article published in the Royal London Ophthalmic Hospital Reports, August, 1880, on glaucoma, Smith mentions embedding specimens in glycerin jelly. During 1896-8 Dr. Charles H. Williams showed several specimens of eyes mounted according to the Priestley-Smith method, somewhat modified, at various society meetings, and at about the same time the method came into use at the laboratory of the Massachusetts Charitable Eye and Ear Infirmary, which was then under the direction of Dr. W. J. Daly and myself. The use of glycerin jelly for the preservation of sections for microscopic examination was considered, to my personal knowledge, a convenient method, a quarter of a century ago. Although found to have been superior to bichromate for fixation, I have made no mention of formalin or the Kaiserling solution, confining myself to the crude and inconvenient method of fixation so much in use at a time when ophthalmology was only beginning to receive recognition, nevertheless the suggestions of 1871 have resulted in the development of a method which to-day is evidently appreciated by the general pathologist as well as by the worker along special lines of investigation.

WILLIAM DUDLEY HALL, M.D.

Disinfection by Formaldehyd.

IOWA CITY, IOWA, July 20, 1906.

To the Editor —A note in THE JOURNAL, July 14, in the department of Miscellany, states that in using the potassium permanganate method of liberating formaldehyd gas the amounts used are 3½ ounces of potassium permanganate and 1 pint of 40 per cent. solution of formaldehyd to every 1,000 cubic feet of air space to be disinfected. During the past two years I have experimented a great deal with this and other methods of generating formaldehyd gas in the Iowa State Board of Health bacteriologic laboratory and in buildings of all kinds to test thoroughly the various methods. I consider the potassium permanganate method of liberating gas as the best. Realizing that it will no doubt be adopted more and more by the physicians of the country, I can not forbear making a correction in the article above referred to.

It is impossible to evaporate a pint of the 40 per cent. solution of formaldehyd with 3½ ounces of potassium permanganate. To do so it will require from 6 to 6½ ounces, and with the use of any less the disinfection, I am sure, will not be satisfactory. The article states that the Maine Board of Health recommends 6½ ounces of potassium permanganate and 2 pints of formaldehyd solution for every 1,000 cubic feet. This is an error. They recommend 13 ounces of the permanganate, according to their recent bulletin on the subject. It should always be borne in mind when using this method that a part of the formaldehyd is changed to formic acid during the process of evaporation. We should use, therefore, correspondingly more of the formaldehyd solution than when employing other methods. For that reason I always recommend that 20 ounces of 40 per cent. formaldehyd solution and 8½ ounces of potassium permanganate be used for every 1,000 cubic feet of room space to be disinfected. I have also found that by first heating the vessel in which the disinfectant agents are placed the evaporation will be more complete. I consider it, therefore, a desirable part of the process.

HENRY ALBERT.

The Retirement of Professor Austin Flint.

NEW YORK CITY, July 17, 1906.

To the Editor:—Cornell University Medical College has suffered a serious loss in the retirement this year of its distinguished professor of physiology, Dr. Austin Flint. The many practitioners who, in their student days, came under his instruction in the former Bellevue Hospital Medical College, and later in Cornell, should be interested in this brief note of farewell.

A man who, up to the present time, has been a vigorous and effective teacher, and who, in his seventieth year, has issued a new edition of his work on physiology, revised and in every respect up to date, must be intellectually still in his prime. The university, having fixed an age limit to the employment of its instructors, was unable longer to reap the advantages of Dr. Flint's services. The loss will fall heavily on the present and future students, for as a teacher the retiring professor has had no superior in the history of American medical education. No one who ever attended his lectures could remain ignorant of the principles of physiology, which he taught not as a mere theory, but as directly related to medical practice. He taught it with a clearness, a thoroughness, and an emphasis that made an indelible impression on those who heard him. This clearness and force of statement were supplemented by a dexterity in demonstration which made his teaching doubly interesting and effective. There have been great lecturers who failed in their experiments, and great experimenters with no talent of expression. Dr. Flint's experiments have been the counterpart of his discipline, exact, lucid, and illuminating. He was never at loss for a word, and his laboratory technic was almost faultless.

This efficiency in the class-room was not merely the aptness to teach of a clever pedagogue. Dr. Flint's skill as an instructor was the result of a perfect mastery of his science, of a facility of speech due to rhetorical instinct and wide reading. As an author Dr. Flint is even more admirable than as a teacher. His work on physiology has become a great scientific classic. Its literary style is without either the pedantry or the vulgarity which mars the works of some of our ablest medical writers. It is a prose style, which, from its simplicity and elegance, will always be classical, yet always modern. To the scientific resources of the author the book bears emphatic witness. Dr. Flint's original work in his department has been manifested in a variety of ways. Not only has he contributed largely to our knowledge of the processes of digestion, secretion and circulation; he is also to be numbered among the ablest neurologists and alienists of our time. For, in addition to his knowledge of cerebral physiology and pathology, his native good sense and his experience as a man of the world have given him prestige in that difficult and delicate department of medical science and practice. As an expert in mental diseases he has always shown himself to be not merely a competent alienist, but an honest man.

About three years ago he collected and published in two large volumes more than sixty essays and articles contributed by him at various times to medical and other periodicals. These show at how many points their author has touched life. Besides the contributions to the literature of his own particular *Fach*, there are papers which relate to many other widely different subjects—historical, medicolegal, diagnostic, therapeutic and dietetic. There are reports on hospitals and other charitable institutions. There are discussions concerning gymnastics, medical ethics, pedagogics, and the practical life of the medical student. All these topics are handled with literary skill, and would of themselves be a lasting memorial of a life devoted to science and letters. The maxim that no evil should be spoken of the dead is sometimes interpreted to mean that there should be no praise of the living. Nothing need here be said of those personal qualities which have reinforced Dr. Flint's scientific attainments and influence. As a controversialist he has frequently aroused bitter antagonism. But his most decided opponents would admit that he has been a fair fighter, and that his manner of warfare has been that of a man, not of a serpent. It is simple justice to say that Dr. Flint has left a permanent impression on the medical institutions of the city, first as dean of the Bellevue Hospital Medical College, and later as one of those who have directed the medical department of Cornell. His example should be of advantage to the new generation of physicians and surgeons, for he has shown how a great specialist and man of science can be efficient in matters of practical importance, and how the genius and virtuosity of a learned physiologist may be combined with the rare distinction of a man of letters.

SAMUEL ALEXANDER.

Triplets Living at Forty-seven Years of Age.

CINCINNATI, July 16, 1906.

To the Editor:—I know of a remarkable case of triplets, born March 24, 1859, living at this time, now 47 years of age, two brothers and a sister. One of the brothers has been a life insurance agent for twenty years, and I know him intimately; all are living in good health. As far as my knowledge goes this record is unequaled. JOHN L. DAVIS, M.D.

"Delicensed" Physician.

CHICAGO, July 17, 1906.

To the Editor:—In a magazine article, having occasion to use an adjective descriptive of a physician with license revoked, I coined "delicensed physician." This term has met no serious objections from the medical profession (I am a practicing lawyer) and as the authorities contain no explicit term for that purpose, I suggest this word. I tried to write this grouping in a sentence, "disbarred lawyer, delicensed physician, suspended clergyman." The sentence is far from pleasing when "physician with license revoked," is used in connection with suspended or expelled clergyman and disbarred lawyer. ELMER E. ROGERS.

Marriages

JOSEPH N. LA LONDE, M.D., to Miss Heisler, both of Cold Springs, Minn.

DWIGHT E. MORTON, M.D., to Miss Bertha C. Bugg, both of Taylerville, Ill., July 5.

HENRY P. SMITH, M.D., Pearson, Ga., to Miss Josie Hinson, Hylbert, Ga., recently.

WILLIAM J. WALSH, M.D., to Miss Jennie Clare Glynn, both of San Francisco, July 10.

THOMAS A. CARROLL, M.D., Easton, Pa., to Miss Charlotte G. Parker, at Baltimore, June 18.

CARL G. ZEIDLER, M.D., Belleville, Mich., to Miss Harriet Fletcher, of Chelsea, Mich., July 5.

CHARLES MICHEL GRAY, M.D., Vineland, N. J., to Miss Myrtle Dickey, of Cornell, N. Y., June 27.

ARTHUR HOFFMANN, M.D., Watertown, Wis., to Miss Maria Meyer of Berlin, Germany, July 28.

ALFRED HUGH FOWLER, M.D., Chicago, to Miss Josephine Smith Bates, of Fairbury, Ill., June 30.

HECTOR MCARTHUR, M.D., Cedar Creek, Neb., to Miss Flossie P. Ferguson, of Omaha, Neb., July 10.

JAMES GLENN VANCE, M.D., Warrior, Ala., to Miss Mary B. McIntosh, at Jamestown, N. Y., July 10.

FRED REEVES, M.D., Oberlin, Kan., to Miss Mary Veeh of Stuttgart, Kan., at Almena, Kan., July 8.

R. L. CLARK, M.D., Detroit, Mich., to Miss Prudence Eliza Chapman of Walled Lake, Mich., July 11.

WELLIE S. MACKENZIE, M.D., Munising, Mich., to Miss Maude Elizabeth Warren of Chicago, June 27.

JOHN F. ARMENTROUT, M.D., Staunton, Va., to Miss Nancy Louise Merritt, in Augusta County, Va., June 27.

CHARLES R. TOMS, M.D., Big Bay, Mich., to Miss Cordelia La Rue, of Republic, Mich., at Marquette, Mich., June 27.

J. HOWARD IGLEHART, M.D., Baltimore, to Miss Nancy Kinnercy, Sweet Chalybeate Springs, Va., at Baltimore, July 18.

Deaths

Walter B. Odiorne, M.D. Harvard University Medical School, Boston, 1890, a member of the American Medical Association, and Massachusetts Medical Society; a recipient of the highest honors on graduation; an interne at the Massachusetts General Hospital, and afterwards a member of the staff of that institution, and associated with Dr J. Collins Warren; one of the most promising and best known of the younger surgeons of Boston, died suddenly at the home of his mother in Cambridge, July 15, from heart disease, aged 33.

Thomas Jefferson Eaton, M.D. University of Michigan, Department of Medicine and Surgery, Ann Arbor, 1867, hospital steward of the One Hundred and Fourteenth Ohio Volunteer Infantry, during the Civil War; a well known chemist and toxicologist of Kansas City, Mo.; a member of the first faculty of Kansas City Medical College; died at the home of his daughter in Kansas City, July 18, from septicemia, following operation on a tumor, after an illness of a year and a half, aged 66.

George Willard Stevens, M.D. University of Michigan Department of Medicine and Surgery, Ann Arbor, 1872, of Toledo, Ohio, a veteran of the Civil War; for many years a local surgeon to the Lake Shore, Hocking Valley and Ohio Central railroads, died at St. Vincent's Hospital, Toledo, after an illness of three years, June 9, aged 59.

Edward G. Tuffs, M.D. New York University, New York City, 1879, of New York City, a member of the Medical Society of the County of New York, the Medical Association of Greater New York, and the New York County Medical Association, died July 20, aged 55.

Edward O. Bell, M.D. Medical College of Ohio, Cincinnati, 1889, a member of the Columbiana County (Ohio) Medical Association, died at his home in East Rochester, Ohio, July 13, from malignant disease of the bladder, from which he had suffered ten years, aged 42.

Robert H. Theyson, M.D. New York University, New York City, 1891, of New York City, a member of the Medical Society of the County of New York, died July 20, from peritonitis, following an operation for appendicitis, aged 50.

William H. Bartles, M.D. Jefferson Medical College, Philadelphia, 1854, formerly a member of the medical staff of the Pennsylvania Hospital for the Insane, Philadelphia, died at his home in Flemington, N. J., July 18, a week after an operation for appendicitis, aged 63.

Charles A. Tinker, M.D. New York Homeopathic College and Hospital, New York City, 1879, of New York City, a member of the New York County Medical Society, died suddenly, from heart disease, at West Hampton Beach, Long Island, July 11, aged 51.

Thomas N. Garnett, M.D. Jefferson Medical College, Philadelphia, 1865, a surgeon in the Confederate service during the Civil War, died at his home in Manchester, Va., July 10, from cerebral hemorrhage, after an illness of one day, aged 82.

Robert H. Allison, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1869, some time port physician of Philadelphia, died suddenly in his office in Ardmore, Pa., July 16, from cerebral hemorrhage, aged 59.

Samuel Thompson, M.D. Rush Medical College, Chicago, 1867, first president of the Tama County (Iowa) Medical Association, physician for the Indian school and agency at Toledo, Iowa, died at his home in Toledo, June 20, aged 62.

David Clark Strachan, M.D. New York Homeopathic Medical College and Hospital, New York City, 1905, interne in Flower Hospital, New York, died at his home in East Orange, N. J., from sarcoma, after a long illness, June 23, aged 24.

David R. Streets, M.D. Department of Medicine of the University of Pennsylvania, Philadelphia, 1880, Hahnemann Medical College, Philadelphia, 1881; died at his home in Bridgeton, N. J., July 15, from heart disease, aged 50.

Andrew Washington Bowman, M.D. Rush Medical College, Chicago, 1878, for twenty-six years an active practitioner of Davenport, Iowa, died at his home in that city, from diabetes, July 17, after an illness of a year, aged 59.

W. F. Troughton, M.D. St. Thomas Hospital, London, England, 1855, for thirty years a practitioner of Seneca, Kan., died suddenly from heart disease, at the home of his daughter in Fort Worth, Texas, June 23, aged 69.

Frederick Warren Trull, M.D. Bellevue Hospital Medical College, New York City, 1886, for two terms coroner and public administrator of Solano County, Cal., died at his home in Vallejo, June 18, from nephritis, aged 44.

Hugh Wallace, M.D. Cincinnati College of Medicine and Surgery, 1887, a pioneer physician of Phillipsburg, Kan., and for many years surgeon of the Rock Island System, at that point, died June 27, from cerebral hemorrhage.

Sherman S. Utz, M.D. Kentucky School of Medicine, Louisville, 1893, who had resided for several years in Texas and Arizona on account of ill health, died at Georgetown, Ind., June 22, from tuberculosis, aged 40.

Louis M. Straus, M.D. Jefferson Medical College, Philadelphia, 1884, formerly mayor and president of the school board of Aurora, Colo., died suddenly at his office in Denver, June 30, from cerebral hemorrhage, aged 52.

Joseph C. Wright, M.D. Howard University Medical Department, Washington, D. C., 1897, a colored practitioner of Pueblo, Colo., died at his old home in South Carolina, July 13, from tuberculosis, after a long illness.

Adam S. Keathly, M.D. Vanderbilt University Medical Department, Nashville, 1887, died at his apartments in Harriman, Tenn., July 8, from hemorrhage of the stomach, after an illness of four days, aged 49.

Marguerite Bell, M.D. Hering Medical College and Hospital, Chicago, 1894, who was under arrest at Detroit for alleged criminal practices, committed suicide by swallowing poison at her home in Detroit, July 17.

George P. Thompson, M.D. St. Louis Medical College, 1873, for 20 years local surgeon of the Frisco System at Golden City, Mo., died suddenly at his home in that city, June 24, from heart disease, aged 62.

James L. Edwards, M.D. Jefferson Medical College, Philadelphia, 1862, a veteran of the Civil War, and for several years a resident of Florence, Colo., died suddenly at his home in Florence, July 8, aged 70.

Albert H. Combs, M.D. Medical College of Indiana, Indianapolis, 1892, secretary of the Board of Health of Marion, died at his home in that city, July 17, from heart disease, after a long illness, aged 40.

Theophilus Gaffner, M.D. Missouri Medical College, St. Louis, 1880, a member of the American Medical Association, died at his home in Trenton, Ill., June 15, aged 54.

Denard S. Williams, M.D. University of Maryland School of Medicine, Baltimore, 1865, a health warden of Baltimore, died at his home in that city from uremia July 13, after an illness of five days, aged 61.

William H. Wolfe, M.D. University of Maryland School of Medicine, Baltimore, 1886, a practitioner of Martinsburg, W. Va., died suddenly, June 14, while driving home from a professional call.

Henry J. Crouse, M.D. Baltimore University School of Medicine, 1899, a practitioner of Neshanic, N. J., died in Somerset hospital, June 29, three days after an operation for appendicitis, aged 52.

George W. Jones, M.D. Northwestern Medical College, of St. Joseph, Mo., 1891, died at his home in Colfax, Iowa, July 14, from injuries received in a fall from his buggy the previous day, aged 50.

Jacob W. Cline, M.D. Miami Medical College, Cincinnati, 1869, formerly of Germantown, Ohio, died at his home near Dayton, June 29, after an invalidism of four years, aged 73.

William Lysander Adams, M.D. Eclectic Medical College of Pennsylvania, Philadelphia, 1876, died suddenly at his home in Hood River, Ore., April 26, from heart disease, aged 85.

W. A. McIntosh, M.D. Toronto Medical College, 1900, formerly a practitioner of Deer Creek, Minn., died in Grace Hospital, Toronto, July 18, after a brief illness, aged 29.

Albert F. Perry, M.D. Meharry Medical College, Weldon University, Nashville, Tenn., 1890, died suddenly, July 12, from pulmonary hemorrhage, in his office at Chicago, aged 45.

Robert Schatelowitz, M.D. University of Helsingfors, Finland, 1893; University of Berlin, Germany, 1897; of Leadville, Colo., died suddenly from heart disease, July 10, in that city.

George W. Gaines, M.D. University of Louisville Medical Department, 1865, died at his home near Hickory Flat, Ky., July 11, after an illness of several years, aged 61.

Ernest T. Lind, M.D. Rush Medical College, Chicago, 1895, died at the home of his father in Chicago, July 22, from pneumonia, after an illness of two weeks, aged 34.

William A. Terry, M.D. Kentucky School of Medicine, Louisville, 1861, died at his home in Big Clifty, Ky., June 9, from tuberculosis, after a long illness, aged 67.

Henry Baethig, M.D. Hahnemann Medical College, Philadelphia, 1870, died suddenly at his home in Buffalo, N. Y., July 14, from heart disease, aged 56.

Samuel M. French, M.D. Hahemann Medical College and Hospital, Chicago, 1882, died recently at his home in Chicago, aged 80, and was buried June 26.

Rudolph H. Hutchason, M.D. Louisville Medical College, 1862, died at his home in Cannelton, Ind., July 13, from uremia, after a short illness, aged 56.

Samuel A. Graham, M.D. Memphis Hospital Medical College, Memphis, Tenn., 1906, was shot and instantly killed at Holder, I. T., June 6, aged 36.

William McAfee, M.D. Hahnemann Medical College, Philadelphia, 1861, died from osteosarcoma at his home in Rockford, Ill., July 20.

Harry Stuart Chatterton, M.D. University of Nashville Medical Department, 1905, died at Paragould, Ark., July 12, from septicemia.

Lorenzo Northrup, M.D. Rush Medical College, Chicago, 1869, a resident of Valley Falls, Kan., since 1855, died in that city, July 9.

The Public Service

Army Changes.

Memorandum of changes of stations and duties of medical officers, U. S. Army, week ending July 21, 1906:

Clarke, Jos. T., surgeon, left Fort Ethan Allen, Vermont, with the 15th Cavalry, en route to Mount Gretna, Pa., for duty.

Thomason, Henry D., asst.-surgeon, left Whipple Barracks, Ariz., en route to Fort Huachuca, Ariz., for duty with the 5th Cavalry en route to Camp near Austin, Texas.

Phalen, Jas. M., asst.-surgeon, reports arrival at Fort Clark, Texas, for duty with Squadron, 1st Cavalry, en route to Camp near Austin, Texas.

Brownlee, Chas. Y., asst.-surgeon, left Alcatraz Island, Cal., with the 22d Infantry, en route to Camp at American Lake, Washington, for duty.

Flagg, Chas. E. B., asst.-surgeon, left Vancouver Barracks, Wash., with troops en route to Camp at American Lake, Wash., for duty.

Quinton, Wm. W., asst.-surgeon, left Fort McPherson, Ga., with the 17th Infantry, en route to Chickamauga Park, Ga., for duty.

Moncrief, Wm, H., asst.-surgeon, left Fort McPherson, Ga. with the 17th Infantry, en route to Chickamauga Park, Ga., for duty.

Powell, Wm. A., asst.-surgeon, reports arrival at Fort Leavenworth, Kans., to accompany troops marching to Camp of Instruction at Fort Riley, Kans. Upon completion of this duty to return to his station at Jefferson Barracks, Mo.

Devereux, J. R., asst.-surgeon, left Fort Logan, Colo., on 15 days' leave of absence.

Carswell, R. L., asst.-surgeon, left Depot of Recruits and Casuals, Angel Island, Cal., en route with 22d Infantry to Camp of Instruction at American Lake, Wash., for duty.

Little, Wm. L., asst.-surgeon, left Fort Sam Houston, Texas, with the First Battalion, 26th Infantry, en route to Camp of Instruction near Austin, Texas.

Grissinger, J. W., asst.-surgeon, reports arrival at Camp Roosevelt, Camp of Instruction, Mount Gretna, Pa., for duty.

Wilson, Compton, asst.-surgeon, left Fort Sheridan, Ill., en route with two battalions, 27th Infantry, to Camp of Instruction, Fort Benjamin Harrison, Ind.

Johnson, R. W., surgeon, left Fort Crook, Neb., with 30th Infantry, en route to Camp of Instruction at Fort Riley, Kans.

Halloran, Paul S., asst.-surg., left Fort Leavenworth, Kans., with the Second Squadron, 9th Cavalry and Field Artillery, en route to Camp of Instruction, Fort Riley, Kans.

Robbins, C. P., asst.-surgeon, left Madison Barracks, N. Y., en route to Camp Roosevelt, Camp of Instruction at Mount Gretna, Pa.

Duncan, L. C., asst.-surgeon, left Fort Snelling, Minn., with troops en route to Camp of Instruction at Fort Benjamin Harrison, Ind.

Purnell, Henry S., asst.-surgeon, left Fort Mackenzie, Wyo., with troops en route to Camp of Instruction at Fort D. A. Russell, Wyo.

Roberts, William, asst.-surgeon, retired from active service, July 15, 1906, on account of disability.

Kirkpatrick, Thos. J., asst.-surgeon, left Fort Moultrie, S. C., en route to Fort McPherson, Ga, for temporary duty.

Keller, Wm. L., asst.-surgeon, left Fort Douglas, Utah, with troops en route to camp of Instruction at Fort D. A. Russell, Wyo.

Edger, Benj. J., Jr., asst.-surgeon, left Fort Sam Houston, Texas, with Field Artillery, en route to Camp of Instruction, Austin, Texas.

Snyder, H. D., surgeon, left Fort Sam Houston, Texas, en route to Camp of Instruction at Austin, Texas.

Boyer, P. L., asst.-surgeon, left Fort Sam Houston, Texas, with First Cavalry, en route to Camp of Instruction at Austin, Texas.

Birmingham, H. P., surgeon, left Fort McPherson, Ga., en route to Maneuver Camp, Chickamauga Park, Ga., for duty as chief surgeon.

The following assignments of assistant surgeons, recently appointed, are ordered:

Love, Albert G., will proceed from Memphis, Tenn., to San Francisco, Cal., and report to the commanding general, Department of California, for assignment to duty with troops in camp in Yosemite National Park, Cal.

Jones, Harold W., asst.-surgeon, will proceed from St. Louis, Mo., and report to the commanding general, Department of California, for assignment to duty with troops in camp in Sequoia National Park, Cal.

Pinkston, Omar W., asst.-surgeon, will report to the commandant of the U. S. Military Prison at Fort Leavenworth, Kan., for temporary duty.

Hanson, Louis H., asst.-surgeon, will proceed from Eau Claire, Wis., to Fort Liscum, Alaska, and report to the commanding officer for duty at that post, relieving First Lieut. Chester J. Stedman, U. S. Army.

Schmitter, Ferdinand, asst.-surgeon, will proceed from Schenectady, N. Y., to Fort Egbert, Alaska, and report to the commanding officer of that post for duty, relieving First Lieut. John R. Bosley, asst.-surgeon.

Reed, Howard A., asst.-surgeon, will proceed from Milford, Pa., to San Francisco, Cal., and report to the commanding general, Department of California, for assignment to temporary duty until October 1, 1906, when he will report to the medical superintendent of the Army Transport Service in San Francisco, Cal., for assignment to duty.

The following named assistant surgeons, recently appointed, will proceed from the places set opposite their respective names, to San Francisco, Cal., and take the transport to sail from San Francisco on or about July 25, 1906, for the Philippine Islands, and on arrival at Manila will report to the commanding general, Philippines Division for assignment to duty: Reasoner, M. A., Morrisonville, Ill., Nichols, Henry J., Binghamton, N. Y., Hopwood, L. L., Des Moines, Iowa; Freeman, C. E., La Grange, Mo.; McIntyre, H. B., Randolph, Vt.

Pyles, Will L., asst.-surgeon, granted one month's leave of absence, with permission to apply for an extension of one month.

Church, James R., asst.-surgeon, left Fort Robinson, Neb., with 10th Cavalry, en route to Camp of Instruction at Islay, near Fort D. A. Russell, Wyo.

Stockard, Jas. K., contract surgeon, returned to duty at Fort Revere, Mass., from temporary duty at Fort Banks, Mass.

Felts, Robert L., contract surgeon, granted leave of absence for three months.

Brown, Wilmont E., contract surgeon, returned from Fort Stevens, Oregon, to duty at his proper station, Fort Walla Walla, Wash.

Adair, Geo. F., contract surgeon, returned from temporary duty at Fort Slocum, N. Y., to duty at his proper station, Fort Wadsworth, N. Y.

Suggs, Frank, contract surgeon, returned to duty at Fort Michie, N. Y., from leave of absence.

Hutson, T. Ogier, contract surgeon, ordered from Fort McPherson, Ga., to Fort Moultrie, S. C., for temporary duty.

Bernheim, Julien R., dental surgeon, left Fort Wadsworth, N. Y., and arrived at Fort Slocum, N. Y., for duty.

Rhoades, Rex H., dental surgeon, left Fort Sheridan, Ill., and arrived at Columbus Barracks, Ohio, for duty.

Wing, Franklin F., dental surgeon, left Fort Riley, Kans., and arrived at Fort D. A. Russell, Wyo., for duty.

Carpenter, Alden, dental surgeon, left Fort Egbert, Alaska, and arrived at Fort Gibbon, Alaska, for duty.

Bonk, S. Davis, dental surgeon, left Columbus Barracks, Ohio, on leave of absence for one month.

Wolven, F. Homer, dental surgeon, left Fort Trumbull, Conn., and arrived at Fort H. G. Wright, N. Y., for duty.

Johnstone, Ernest K., contract surgeon, ordered to duty at the Presidio of San Francisco, Cal.

Miller, Wm. G., contract surgeon, relieved from duty in the Philippines Division, and ordered to the United States.

Hogan, David D., contract surgeon, left Fort Hamilton, N. Y., and arrived at Fort Jay, N. Y., for temporary duty.

Harris, Herbert L., contract surgeon, granted an extension of one month to his leave of absence.

Public Health and Marine-Hospital Service.

List of changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service for the seven days ending July 18, 1906:

Bailhache, P. H., surgeon, directed to proceed to Buffalo, N. Y., for special temporary duty, on completion of which to rejoin station at Stapleton, N. Y.

Mead, F. W., surgeon, temporarily relieved from Sanitary Inspection Board in Washington and directed to proceed to Point Pleasant, N. J., for the purpose of making physical examinations of keepers and surfmen in the Life Saving Service.

Kalloch, P. C., surgeon, directed to proceed to Sayville, N. Y., for the purpose of making physical examinations of keepers and surfmen in the Life Saving Service.

Cobb, J. O., surgeon, leave of absence granted for 10 days from June 25, amended to read nine days only.

Stimpson, W. G., surgeon, granted leave of absence for fifteen days, from July 28.

Blue, Rupert, P. A. surgeon, temporarily relieved from Sanitary Inspection Board in Washington, and directed to proceed to Tuckerton and Atlantic City, N. J., for the purpose of making physical examinations of keepers and surfmen of the Life Saving Service.

Goldberger, Joseph, P. A. surgeon, directed to report to P. A. Surgeon M. J. Rosenau, chairman of the board making investigations as to the prevalence and origin of typhoid fever in the District of Columbia, for temporary duty.

Earle, B. H., P. A. surgeon, temporarily relieved from Sanitary Inspection Board in Washington, and directed to proceed to Ocean City, Md. Chincoteague, Wachapreague and Cape Charles City, Va.

Lloyd, B. J., P. A. surgeon, granted leave of absence for 12 days from May 25.

McCoy, J. W., P. A. surgeon, directed to proceed from San Francisco, Cal., to Fort Stanton, N. M., reporting to the Medical Officer in command for duty and assignment to quarters.

Bogress, J. S., asst.-surgeon, directed to proceed to Freeport and Sayville, N. Y., for the purpose of making physical examinations of keepers and surfmen of the Life Saving Service.

Roberts, N., asst.-surgeon, relieved from duty at Fort Stanton, N. M., and directed to proceed to Washington, D. C., for temporary duty in the Hygienic Laboratory.

Salmon, T. W., asst.-surgeon, granted leave of absence for fourteen days from July 14, on account of sickness.

Gibson, L. P., acting asst.-surgeon, granted leave of absence for five days.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended July 20, 1906:

SMALLPOX—UNITED STATES.

Illinois: Galesburg, July 7-14, 9 cases.
Louisiana: New Orleans, July 7-14, 10 cases, 1 death.
Massachusetts: New Bedford, July 7-14, 2 cases.
Montana: General, June 1-30, 7 cases, 1 imported.
New York: New York, July 7-14, 2 cases.
Ohio: Cincinnati, July 6-13, 1 case.
South Carolina: Camden, July 7-14, 1 case.
Tennessee: Memphis, July 7-14, 1 case.
Texas: Hopkins County, to July 12, 50 cases.
West Virginia: Marshall County, April 1-July 14, 24 cases.
Wisconsin: Appleton, July 7-14, 3 cases; La Crosse, 1 case.

SMALLPOX—INSULAR.

Philippine Islands: Manila, May 26-June 9, 2 cases.

SMALLPOX—FOREIGN.

Chile: Antofagasta, May 21-June 4, 8 cases, 4 deaths.
Great Britain: Hull, June 23-30, 1 case.
Greece: Athens, June 18-25, 1 death.
India: Bombay, June 12-19, 3 deaths; Calcutta, June 2-9, 33 deaths; Karachi, June 10-17, 7 cases, 1 death; Madras, June 9-15, 5 cases; Rangoon, June 2-9, 8 deaths.
Siberia: Vladivostock, May 28-June 4, 3 cases.

YELLOW FEVER.

Costa Rica: Limon (thirty miles from), 3 cases.
Mexico: Merida, June 24-July 7, 15 cases, 12 deaths.

PLAGUE.

Australia: Brisbane, May 16, 1 death; Fremantle, May 31, 1 case; Perth, May 15, 1 death; Rockhampton, May 13, 1 case; Sydney, May 10, 1 death.
India: Bombay, June 12-19, 67 deaths; Calcutta, June 2-9, 43 deaths; Karachi, June 10-17, 51 cases, 49 deaths; Rangoon, June 2-9, 74 deaths.
Chile, Antofagasta, May 20-June 4, 10 cases, 1 death.
Egypt: Alexandria, June 23, 1 case; Minieh, June 27, 1 case.
Peru: Lima, June 9-16, 1 case, 1 death; Paita, 1 case, 1 death; Trujillo, 1 death.
Japan: Formosa, May 1-31, 788 deaths.

CHOLERA—INSULAR.

Philippine Islands: Manila, May 26-June 9, 2 cases, 2 deaths; Provinces, 6 cases, 2 deaths.

CHOLERA—FOREIGN.

India: Bombay, June 12-19, 20 deaths; Calcutta, June 2-9, 38 deaths; Madras, June 9-15, 3 deaths.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish name or address will be faithfully observed.

COMPOSITION OF SAL-CODEIA (BELL).

GRANT, IOWA, July 20, 1906.

To the Editor:—Will you kindly state what "Sal-Codeia (Bell)" contains?

M. B. WEIR.

ANSWER.—According to the analysis by the Council on Pharmacy and Chemistry the contents of original sealed packages as purchased in the market were found to be a mixture containing the following ingredients approximately in the proportions given: Acetanilid, 43; sodium bicarb., 21; sodium salicylate, 20. See THE JOURNAL, June 3, 1905.

STUDY OF GYNECOLOGY AND OBSTETRICS IN GERMANY.

NEW YORK, July 21, 1906.

To the Editor:—In your reply to Dr. J. L. S., THE JOURNAL, July 21, you say: "Any one with a limited knowledge of German who goes to Germany to study should at once secure a teacher and devote several hours a day to securing a working knowledge of the language."

Permit me to say that this could be done before he goes to Germany, but it would prevent him from ever learning German so that he could think in German. I would advise boarding with some family in a small town or village where no English is spoken, hear Germans speak among themselves; in other words, learn by the ear first of all. Within four or six weeks he will understand more than he will be able to learn by books in six months. Very soon he will be delighted to find himself able to read light literature and able to dispense with the dictionary. He should commence with children's, or blood-and-thunder, stories, and only when he can read such simple language with great facility should he take up good books written in elegant style, by means of which he learns the rules of grammar without a grammar. This is the advice Macauley has given; hearing the language by the ear will enable him to think in the language, while commencing with teacher and books will teach him to translate. What a pity to go to Germany and to take a teacher to learn German?

A. ROSE.

APPOINTMENTS IN ARMY AND NAVY MEDICAL SERVICE.

OHIO, July 14, 1906.

To the Editor:—1. What *modus operandi* is necessary to secure an appointment in the commissioned medical and surgical service of the U. S. Army or Navy?

2. What are the addresses of the secretaries of the registration boards of (a) South Dakota, (b) Kansas and (c) Oklahoma?

C.

ANSWER.—1. Persons of the required age and attainments are eligible to examinations which are held at certain intervals. For circular giving information address the surgeon-general of the medical department of the Army—or of the Navy—at Washington, D. C.

2. (a) Dr. H. E. McNutt, Aberdeen, S. D.; (b) Dr. F. P. Hatfield, Grenola, Kans.; (c) Dr. J. W. Baker, Enid, Okla.

LENGTH OF QUARANTINE IN DIPHTHERIA.

SEATTLE, WASH., July 13, 1906.

To the Editor:—Will you kindly express an opinion as to the length of time quarantine should be kept up in a case of diphtheria in which all clinical symptoms have disappeared, but in which repeated throat cultures are positive after many days. It has appeared to me that too strict an insistence on an arbitrary rule may create an undue prejudice against really necessary restraint. I see it stated in at least one text-book that the Klebs-Loeffler bacilli may linger in the throats of patients for weeks or even months.

W. R. TYMMS.

ANSWER.—Isolation of the patient should continue until at least two microscopic examinations on two consecutive days fail to show the bacilli. If the diphtheria bacilli are infectious, and they are, there is no question that a child with the disease germs in the throat or secretions of the nose or mouth is a source of danger to the public. If such a case is treated with cleansing and germicidal sprays in the throat and nose the disappearance of the germ can be

hastened. Boston, New York and Philadelphia terminate quarantine in cases of diphtheria only on the absence of the diphtheria bacilli, determined by two or three examinations with the microscope on consecutive days with as many negative results. In Chicago the physician does not make the microscopic examination, the department of health sends a medical inspector to the case to take cultures for the municipal laboratory as no disinfection of premises in diphtheria is undertaken until two or three examinations on consecutive days show absence of the Klebs-Loeffler bacilli. In cases where no microscope is used isolation in the mild cases should be not less than ten days after all membrane has disappeared from the throat and nose. In severe cases isolation should continue not less than three weeks after all membrane has disappeared from the throat and nose. If there remains any discharge from the throat, nose, ears, eyes or if there is evidence of inflammation of the kidneys the time of isolation should be extended till these local disorders have disappeared. The more scientific and exact method of terminating cases by the laboratory method is to be preferred.

THE CAUSE OF BAD BREATH.

STILLWATER, OKLA., July 9, 1906.

To the Editor:—Can you help me out? I have a man 43 years old, in perfect health, who has never had a sick day. His breath is something awful, his tongue is clean; he always has washed his teeth three times a day, there is absolutely nothing the matter with his nose or throat, and when he breathes through his nose his breath is not nearly so bad. He has used everything that one can think of until I have come to the conclusion that it is his teeth alone. I notice that people with false teeth never have bad breath when they keep them clean. He is exceptionally clean in his person, highly intelligent, and this condition is awful, for it can be noticed across the room, and smells like something dead. Any help on the above will be appreciated. J. T. GRAY.

ANSWER.—An answer to a question like the above, which contains so few details, can only be along general lines. A foul, offensive odor, "like something dead" as mentioned, can only come from the decomposition of organic matter due to saprophytic organisms, and the diagnostic problem before one is, first, to discover the location of the decomposing matter. This may be in the stomach, in which case a gastric lavage would settle the question by removing the decomposing matter. One of the most frequent causes of such a foul breath is retention of decomposing caseous matter in the crypts of the tonsils. This condition may not produce any gross evidences of tonsillar trouble nor any subjective manifestations. The crypts most commonly involved are one or two large ones occupying the upper surface of the tonsil between the diverging pillars of the fauces or overlapped by one of the pillars, so they are difficult to find, and must be sought in order to be discovered. Crypts in this location are not emptied of their contents when the tonsil is compressed during the ordinary act of swallowing. Similar little, foul, cheesy masses may form in the follicles at the base of the tongue, where they are likewise difficult to locate. The teeth should be gone over by a competent dentist, who will be able to locate and remedy any cavities, etc. The pharyngeal adenoids and postnasal space may also harbor decomposing matter. The accessory sinuses, such as the frontal, ethmoidal, sphenoidal and the antrum of Highmore must be searched as possible sources of the trouble. The smallest particle of carious bone in the nasal or oral cavity may produce an exceedingly foul odor, which is very penetrating. A bad odor may also originate from decomposing secretions retained in the bronchi or lung tissue. It will thus be seen that the diagnosis in this case must rest with the one who is able to locate the decomposing matter.

Book Notices

OPERATIVE SURGERY. By Joseph D. Bryant, M.D., Professor of Principles and Practice of Surgery, Operative and Clinical Surgery, University and Bellevue Hospital Medical College. Fourth Edition. Cloth. 2 Vols. Pages, 1527. Illustrations, 1793, of which 198 are in colors. Price, $10.00. New York: D. Appleton & Co., 1906.

Bryant's Operative Surgery has fairly won a distinct place for itself among American text-books on surgery. This fourth edition follows very rapidly on the third, showing a large demand for the book. The general principles of operative surgery are clearly and fully handled in the three opening chapters. This is followed by the surgery of the tissue systems, vessels, nerves, bones, etc.; this again by the operative surgery of the regions. The descriptions of the operations are very complete and are made more graphic by the assistance of excellent plates. In describing each operation the anatomic points are fully presented, the instruments required, the precautions to be taken, and comments on unusual features are so clear as to give to him who consults the book a very useful guide in the actual performance of the work.

The second volume, devoted to the abdomen and thorax, is especially valuable to the operative surgeon of to-day. The subjects of intestinal and gastric surgery and the surgery of the other abdominal organs, which occupies so much of the time of the modern hospital surgeon, are most admirably presented. In the chapter on the surgery of the liver, one might suggest a fuller exposition of the incisions desirable in this work and the omission of several methods, which have evidently been given up after trial, such as Halstead's hammers for common duct work and Murphy's modified button for drainage in cholecystotomy, which are probably no longer employed, even by the originators themselves. The chapter on hernia is very full and complete, and proper credit given to such important operations as Andrew's imbrication method for inguinal hernia and Mayo's operation in umbilical hernia. The chapter on surgery of the prostate is well up to date and unusually well illustrated.

Throughout the book Dr. Bryant presents not only the methods which he has found useful and has adopted in his own clinic, but practically all the methods which have the approval of well recognized authority. This scheme has resulted in the development of a text-book which lacks somewhat the personal character of such an operative surgery as Kocher's, but gives the reader a broader view and a choice of methods. Taken as a whole, the work is one of the best expositions of operative surgery in the English language and deserves the favorable reception which has been given to it.

THE TEETH AND THEIR CARE. By T. P. Hyatt, D.D.S., Member Second District Dental Society of the State of New York. Cloth. Pp. 43. Price, 50c. Brooklyn, N. Y.: King Press, 1905.

In this little book will be found information regarding the teeth that every layman should have, and hints regarding their care that, if followed, will prevent not only early decay, but certain digestive disorders.

Miscellany

Survival of Parties Drowning Together.—Rochon has been experimenting on animals and believes that he has demonstrated that a person succumbing to asphyxia in the water dies sooner than when a condition of apparent death has been early produced by inhibition from the nervous shock. With the nervous asphyxia the person ceases to breathe and no water is drawn into the lungs. Death seems to be immediate and yet it is liable to be only apparent and the individual may be resuscitated after a comparatively long interval. With true asphyxia the water is drawn into the lungs and other changes occur, easily recognized at the autopsy. The interval during which resuscitation is possible is much shorter than in case of suspended animation from nervous inhibition. Consequently the individuals in the latter condition survive those succumbing to asphyxia. His communication on the subject is published in the *Jour. de Méd. de Paris* for June 3, 1906.

Cholemia in Melancholia.—Cololian (*Arch. de Neurol.*) believes that disorder of the liver plays an important part in the pathogenesis of melancholia, and publishes a number of case histories which he considers go far to demonstrate this fact. He would almost say that biliary disease and simple "familial cholemia" have a direct causal relation to the mental disorder. The frequency of gallstones at the autopsies of melancholiacs is something more than a mere coincidence. In the cases of recovery from melancholia that he has observed it was only after disappearance of the hepatic disorders that the favorable mental change took place. The urobilin disappeared gradually from the urine and the Gmelin serum reaction became less marked till it finally disappeared. He concludes, therefore, that melancholia is a general and simultaneous affection of the viscera and the brain in which the liver is involved prior to the symptoms of mental depression. Its lesions seem to affect the mental state of the predisposed and the degenerate.

Humidity.—McAirty, in the *Montreal Medical Journal*, June, 1906, states that in regard to humidity the dwellings of the poor, supplied by the boiling kettle on the kitchen stove, are apt to be in a more satisfactory state than steam-heated flats where no special provision for a proper degree of moisture has been made. Air saturated with moisture at zero will have a humidity of only six when heated to 70 F., and the average indoor humidity in winter is often from 28 to 30, necessitating a temperature of from 76 to 78 to make most people comfortable. A degree of humidity of 60 per cent. makes a temperature of 65 comfortable and produces less nervous tension than a higher and dryer atmosphere, while the effect of such air on the skin and respiratory mucous membranes is injurious. McAirty describes an apparatus for furnishing and regulating the supply of moisture for small hospitals or apartment buildings, but not suitable for private houses or small buildings.

Roentgen Rays Plus Diphtheria Antitoxin in Pernicious Anemia.—Renon and Tixier report marked benefit in a case of pernicious anemia from injections of diphtheria antitoxin and Roentgen treatment. They found that each of these measures started a vigorous myeloid reaction. The bone marrow, they think, is evidently stimulated to a reaction by the leucolysins formed by destruction of white corpuscles under the influence of the Roentgen rays. The same effect is also induced by the hemolysins formed by the action of the diphtheria antitoxin. The energy of the reaction gradually decreases, consequently the two procedures were applied alternately. The patient was a woman of 68, who had noted the first symptoms eighteen months previously. When first seen there were 880,000 red and 2,000 white corpuscles in the field. Three months later, under the combined treatment, the reds numbered 2,405,000 and the whites 4,000, while the general health showed great improvement. The eosinophiles increased regularly from 3 to 16 during the six hours after an injection, or *x*-ray exposure. The case is described in detail in the *Bull. Soc. Méd. des Hôp. de Paris* for March 15. Josué's experimental research has also confirmed the specific action of diphtheria antitoxin on the hemoglobin elements of the blood.

A Physician's Impression of Osteopathy.—Louis Faugères Bishop, in *Merck's Archives* for April, considers osteopathy as a negative propaganda denying the utility of drugs and basing its practice on partial truths which have in the past been advanced as theories by members of the medical profession. He sums up his impressions as follows: Osteopathy "falls within the class of negative propagandas in denial of a wider pathology than that contained in their theory, and a therapy wide enough to include the use of drugs. That the physical and mental influence of their practice will benefit a considerable number of people there can be no doubt, but it is equally certain that it is an absolutely unsafe system for anyone suffering from serious disease. Relying on it is like extinguishing every light in the city but one, and trying to find one's way about." Whether positive harm will result from the narrow view of the osteopathist will depend on the honesty and intelligence of those who practice the art. Bishop believes that the community should require those who confine their practice to such a narrow field to be educated in the fundamental sciences which no one denies have a bearing on the understanding and treatment of disease, and that they shall be persons mentally and morally honest, and we would add, limit their practice to what they advocate as their only method of therapeutics, manipulation. If such practitioners have any new facts or useful methods to teach the medical profession, let them come forward and they will be given an opportunity to do so.

Abscess from Spinal Caries.—According to T. H. Kellock in the *Clinical Journal*, May 30, 1906, operation for abscesses resulting from caries of the spine may be delayed for a time if the patient's general condition needs improving, but when resorted to the operation should be conducted according to the following principles: Early operation should be done while the abscess is still deeply situated, the opening being made through the thickest layer of healthy tissue available, but not when the skin is implicated or when the abscess is near the surface. The opening should be made through rather than between muscles, the contents of the abscess should be completely evacuated, the interior gently scraped and the cavity irrigated and thoroughly dried. The openings through the structures covering the abscess should be closed with care and thoroughness in their order from within out. Small quantities of solution of adrenalin may advantageously be left in the cavity if there is any difficulty in getting it quite dry, but antiseptic and bactericidal solutions are unnecessary and may be injurious. Drainage is unnecessary and disadvantageous. Pressure to keep the walls of the abdomen collapsed is open to objections. If fluid recollects it can be removed by aspiration; if the suppuration recurs another opening should be made, by a fresh route if practicable. Disease in various regions of the spine requires special application of these principles.

Prolapsus Ani and Procidentia Recti.—D. Drew calls attention to the importance of the distinction between *prolapsus ani* and *procidentia recti*. In the former only the mucous membrane is involved, while in the latter the mass is composed of the whole of the rectal wall, and if removal is attempted the abdominal cavity will be opened. Prolapsus is common in adults, but procidentia is rare, although it may occur in children or in old age. It may be brought about by any condition that tends to increase the intra-abdominal tension, and is often associated with a weakness of the structures composing the pelvic floor or loss of support from a ruptured perineum. In children ordinary methods of replacement may be effective, or linear cauterization may be necessary. Drew has found it a better plan to remove one or more lenticular-shaped pieces of mucous membrane from the prolapsed part and to suture the edges. In adults these methods are ineffective, and by far the most promising method is to treat the mass by excision. For this purpose the peritoneum must be incised by a cut beginning at the junction of skin and mucous membrane and avoiding the sphincter. The peritoneum is then stitched to the bowel above the point of proposed excision. The redundant bowel is then amputated and the mucous membrane stitched to the skin. Drew has operated in this manner in two cases.—*Clinical Journal*, May 30, 1906.

Thyroid Migraine.—L. Lévi and H. de Rothschild have recently reported a number of cases of migraine in which the acquired or inherited tendency was successfully combated by thyroid treatment. The patients all presented signs of the mild chronic insufficiency of the thyroid gland of which Hertoghe has made a special study. Among these signs are chilliness, friability of the nails, fall of the teeth and hair, constipation and pains in the joints, with scanty or painful menses. In five of the cases the migraines were suspended during pregnancy and in two others they first appeared during a pregnancy. In one of these cases the migraine vanished during a second pregnancy, but reappeared at its close. The functional increase in the work of the thyroid gland during a pregnancy affords a kind of autotherapy of the pre-existing thyroid insufficiency. The subsidence of the thyroid gland to its previous condition of insufficient functioning after the termination of the pregnancy brings on the migraine anew. In five of the female patients a connection between the migraine and the menses was apparent. The chief argument, however, in regard to the thyroid nature of the migraine is afforded by the efficacy of thyroid treatment. The periodic headache may be unilateral or bilateral or alternating on each side; it may be in the brow, the back of the neck or in the face, and may last only for a few hours or as long as three days. Besides this thyroid migraine there is a form of continuous cephalalgia, accompanied by vertigo, which yields also to thyroid treatment. They reported an example of this variety in their communication to the Paris Société Méd. des Hôp. at the meeting on May 11.

Asylum Dysentery.—Dysentery still occurs in British asylums for the insane though it has practically disappeared from Great Britain as a whole. It occurs not only in old asylums, but also in new ones. On the other hand it does not occur in other institutions where large numbers of persons are congregated and in which there are no hygienic defects. The reason for this special susceptibility of the insane has

been supposed to be some trophic defect of nerve function. In an important paper on "The Etiology of Asylum Dysentery" contributed to the *Journal of Mental Science*, April, Dr. W. B. Knobel has thrown considerable light on the problem. He finds that there is an association between lesions of nerve cells and fibers of the spinal cord and ganglia and atrophy of the cerebral gyri on the one hand and diseased states of certain abdominal viscera, including acute inflammatory conditions of the colon on the other hand. Evidently trophic influence is impaired in insanity. Dr. Knobel believes that the existence of the "privy atmosphere" in asylum wards is also a factor. He concludes that many microbes, either singly or by mixed infection, can produce dysentery; that disturbance of the subsoil in the neighborhood of an asylum is liable to be followed by an outbreak of dysentery; that asylum dysentery can be caused by some microbe that normally inhabits the colon and becomes pathogenic when the resisting power of the tissues is reduced; that dysentery is not spread by the transfer of recovered cases from ward to ward, and that increased precautions which have been taken within recent years have not diminished the incidence or mortality of the disease.

The Medical Journals of Great Britain.—An interesting sketch of our British exchanges is contributed by J. P. zum Busch, of London, to the current number of the *Deutsche med. Woch/t.* After describing the general features of the *British Medical Journal* and the *Lancet* he comments with high approbation on their annual "students' number," which is a feature unknown in Germany. He remarks on the absence of any journal devoted exclusively to surgery or to internal medicine. Other specialties have several journals, and there are some devoted to hygiene, to social medicine and to alcoholism. He explains this lack as due to the absence in England of the great class of assistants who serve in the German clinics for years, and whose researches and compilations fill the medical and surgical journals in Germany. In England the assistants are the young internes who stay only for a year or so and then give place to others. The medical chiefs receive no salary, and lacking the help of the long trained assistants have less incentive to special, purely scientific and especially experimental researches. The diseases encountered in the hospitals are described in the annual reports, and the transactions of the various medical societies contain many important communications. None of the medical journals of Great Britain pays for scientific articles, he adds, and none gives reprints free of charge. The *British Medical Journal* is divided about equally between reading matter and advertisements, and it receives $40 a page for the latter. In conclusion he remarks: "In spite of the limited number of medical journals in England, yet too much is written and published, while the output of really important articles is small. The same evil prevails here as in Germany that a surgeon, for instance, who is interested in a special operation, publishes articles about it in every available journal, and yet they all contain practically merely the same thing. Besides this, the number of physicians who write is comparatively small. The same names are encountered over and over again, and often enough also the same ideas, served up again and again in slightly altered guise. The lack of a good *Centralblatt*, to furnish summaries of the current literature of the country, is much to be deplored."

Maternity Hospital for Turkey.—The Constantinople correspondent of the *Lancet* states that a Turkish newspaper announces that the Ottoman government has decided to establish maternity hospitals in the chief provincial towns. It is supposed that some will be located in the female sections of already existing infirmaries in these towns. The women, especially those of the poorer classes, will receive there careful treatment at the hands of medical men and qualified midwives. Should this decision of the Ottoman government take a definite practical issue it will prove to be a great boon to females in the provinces, for in provincial Turkey pregnant women are exposed to many dangers owing to the practices indulged in by a formidable host of unqualified, unscrupulous, extremely ignorant and superstitious *sages femmes*. These latter hold almost an unlimited sway in the provinces and, indeed, in the suburban districts of the capital itself. The *Lancet's* correspondent states that he has under treatment a great number of suffering women of the poorer classes and of various nationalities. Many among them are afflicted with different kinds of uterine trouble directly traceable to the mismanagement and ignorance of these unqualified midwives, whose notions of the most primitive rules of cleanliness and disinfection are very scanty indeed. Of late the government has tried to restrict the mischief by prohibiting the non-licensed women from engaging in midwifery practice, but the attempts have proved futile; they still abound, thriving on the utter ignorance of the population. In Turkey generally women in labor or with uterine trouble dislike calling a male physician, preferring to be treated by one of their own sex, no matter how lacking in the requisite knowledge. One maternity hospital exists in Constantinople and has been doing good work for ten years.

State Boards of Registration

COMING EXAMINATIONS.

PENNSYLVANIA State Board of Medical Examiners, Haddon Hall, Atlantic City, New Jersey, July 30. Secretary, Joseph H. Willetts, Westinghouse Building, Pittsburg.

NEVADA State Board of Medical Examiners, Carson City, August 6. Secretary, S. L. Lee, Carson City.

NEBRASKA State Board of Health, State House, Lincoln, August 8-9. Secretary, Geo. H. Brash, Beatrice.

MISSOURI State Board of Health, St. Louis, August 8-9. Secretary, J. A. B. Adcock, Warrensburg.

CALIFORNIA State Board of Medical Examiners, San Francisco, August 21. Secretary, Chas. L. Tisdale, San Francisco. (Applications must be in August 4.)

Illinois April Report.—Dr. J. A. Egan, secretary of the Illinois State Board of Health, reports the written examination held at Chicago, April 18-20, 1906. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 125, of whom 115 passed, 4 failed, and 6 did not complete the examination. Those who passed were from the following colleges:

	Year Grad.	Number Examn'd.
Meharry Med. Coll.	(1895)	1
Bennett Coll. of Ecl. Med. and Surg.	(1906)	37
National Med. Univ., Chicago	(1906)	3
Rush Med. Coll., (1900) 2; (1903) 1; (1904) 1; (1905) 2; (1906) 4;		10
American College of Med. and Surg., Chicago	(1906)	20
Hahnemann Med. Coll., Chicago	(1906)	19
Northwestern University	(1902)	1
Illinois Med. Coll.*	(1906)	3
College of P. and S., Chicago, (1904) 1; (1905) 1; (1906) 7;		9
Hering Med. Coll., Chicago	(1906)	1
Chicago Homeo. Med. Coll.	(1904)	1
Indiana Med. Coll.	(1906)	4
Keokuk Med. Coll.*	(1905)	1
University of Louisville	(1893)	1
Barnes Med. Coll., St. Louis	(1906)	1
St. Louis University (Marion-Sims Beaumont Med. Coll.)	(1899)	1
University of Pennsylvania	(1903)	1
University of Edinburgh, Scotland	(1899)	1

Those who failed were from the following colleges:

Hahnemann Med. Coll., Chicago	(1906)	2
Bennett College of Eclectic Med. and Surg.	(1906)	1
Barnes Med. Coll., St. Louis	(1905)	1

*Now the Keokuk Medical College, College of Physicians and Surgeons.

Kansas May Report.—Dr. T. E. Raines, secretary of the Kansas State Board of Medical Registration and Examination, reports the written examination held at Topeka, May 1-2, 1906. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 98, of whom 72 passed and 26 failed. The following colleges were represented:

PASSED. College.	Year Grad.	Per Cent.
University Med. Coll., Kansas City (1893) 79; (1905) (1906) the grades of 76 and 77 were reached by one each, 78 by four; 79 by five; 81 by one, 82 by six and 83 and 90 by one each.		81.
Hahnemann Med. Coll., Kansas City.	(1906) 75, 77, 80, 80.	
Bennett Med. Coll., Chicago	(1906) 75,	78.
Rush Med. Coll.	(1906)	90.
Eclectic Medical University, Kansas City	(1906)	78.
College of P. and S., Boston	(1904)	80.
Ensworth Central Med. Coll., (1904) 75; (1906) the grade of 75 was reached by four, 76, 77, 78 and 82 by one each.		
Kansas Med. Coll., Topeka (1904) 77; (1906) the grade of 75 was reached by two, 76 by one, 77 by two, 78 by one, 79 by four, 80 by two, 81 and 82 by one each and 83 by two.		
Miami Med. Coll., Cincinnati	(1905)	80.
Lincoln Med. Coll.	(1906) 76, 77, 79, 80.	

Meharry Med. Coll.....(1906) 79,	81.
Keokuk Med. Coll., Coll. 5 and 8. (1896) 80; (1897)	75.
Woman's Med Coll. of Pa. ...vania.....(1902)	80.
University of Missouri.....(1905)	78.
Tufts College Med. School.....(1906)	76.
Louisville Med. Coll.....(1903)	76.
College of Med. and Surg., Chicago.....(1905)	79.
Barnes Med. Coll.....(1905)	76.

FAILED.

Denver and Gross Coll. of Med.....(1905)	70.
Hospital Coll. of Med., Louisville.....(1898) 69, 70,	74.
University Med. Coll., Kansas City.....(1906) 73,	74.
Meharry Med. Coll.....(1906)	73.
Ensworth-Central Med. Coll. (1904) 74; (1905) 65, 73; (1906); the grades of 70 and 73 were reached by one each, and 74 by four.	
Ontario Med. Coll.....(1891)	68.
Eclectic Med. University, Kansas City. (1905) 68; (1906)	68.
Barnes Med. Coll.....(1903) C3; (1905) 66; (1906)	74.
Homeo. Med. Coll. of Missouri.....(1902)	72.
Lincoln Med. Coll.....(1906)	74.
Hahnemann Med. Coll., Chicago.....(1885)	70.
University of Cleveland.....(1887)	61.

The following questions were asked:

SURGERY.

1. What are the best non-operative methods of reducing incarcerated inguinal and femoral hernia? 2. Describe the symptoms and physical signs of tuberculosis of the hip joint. 3. Give the mode of reduction of backward luxation of hip. Forward luxation of shoulder and backward and upward of the lower jaw. 4. Fracture of skull: (a) Why are fractures of skull slower in repair than other flat bones? (b) Which shows most rapidity in repair, outer or inner table; (c) is callus greater or less than in other flat bones? 5. Describe the methods of reducing dislocations of the hip; i. e., (a) Give the causes, pathology, symptoms, diagnosis. (b) Differentiate from inter-capsular fracture. 6. Give the classification of tumors conforming to the types of fully-formed connective tissue. 7. Give in detail the preparation of a patient for tracheiorrhaphy. Give technic of operation. 8. Describe Colles' fracture. Give treatment and differential diagnosis between that and dislocation of the wrist. 9. Give treatment of traumatic rupture of the urethra. 10. Give minute description and write one page on classification and treatment of burns.

REGULAR MATERIA MEDICA AND THERAPEUTICS.

1. Does the Pharmacopeia differ from a dispensatory and how? 2. What are the physiologic actions of the aromatic bitters. 3. What are the therapeutic uses of cinchona and its alkaloids. 4. What are the therapeutic uses of iodine? 5. What medicines are incompatible with the iodids? 6. What are the effects, uses and dose of calcium chlorid? 7. What are the preparations and doses of belladonna and cannabis indica? 8. What medicines are incompatible with opium? 9. What are the medicinal uses of coca and its alkaloid? 10. What are the cardiac sedatives? Name the principal ones.

REGULAR THEORY AND PRACTICE.

1. Cerebrospinal meningitis—etiology, prognosis and treatment. 2. Acute articular rheumatism—diagnosis and treatment. 3. Purpura—symptoms and treatment. 4. Pneumonia—diagnosis and treatment. 5. Sounds of the heart—how many, and what sounds do we get in diseases of the heart? 6. Addisons disease—diagnosis and treatment. 7. Tabes dorsalis—anatomic characters and symptoms—8. Pyemia—anatomic characteristics, symptoms and treatment. 9. St. Anthony's fire—diagnosis and treatment. 10. Diphtheria—anatomic characters, treatment and sequela.

PHYSIOLOGY AND HYGIENE.

1. What are the functions of the capillaries? Where is lymph found? 2. Describe the phenomena of reflex action. 3. What are the phases of the cardiac cycle? How long to complete it? 4. Into how many great classes are food stuffs divided? Name them. 5. What is the action of bile on food? Describe bile pigment. 6. Describe the process of respiration. What is residual air? 7. What is colostrum? Describe and tell its action. 8. How is heat lost to the body? Give proportionate amount of each process. 9. What is meant by automatic action of the spinal cord? Give three examples. 10. What is the composition and character of urine?

HYGIENE.

1. Give a law necessary in preserving the health of the muscles and bones. 2. What can you say about the quantity of light allowed to the sick room? 3. What is the effect of too frequent eating? Give three reasons. 4. What food is best adapted to infancy? To old age? 5. In preserving health, what is of greater importance than warming the room? 6. What is the simplest mode of bathing the sick? 7. What is meant by reaction? 8. What is the predisposing cause of nervous diseases? 9. Is repetition necessary to make a durable impression on the mind? What is? 10. Give the hygiene of the secretory organs.

HOMEOPATHIC MATERIA MEDICA.

1. Name four remedies that act markedly on the skin, on the blood, on bronchi. 2. Give physiologic action of sulphur. 3. Give mental and nervous symptoms of aconite and gelsemium. 4. Mention the organs or tissues affected by illium thg., veratrum viridi and plumbum. 5. Give urinary symptoms of terebinth, ferrum phos. and lycopodium. 6. Differentiate phytolacca, lachesis and apis in diphtheria. 7. Name six remedies you would expect to use in acute diarrhea, and give three characteristic indications for one of them. 8. Give three essentials of a homeopathic prescription. 9. Differentiate spigelia, magnesia phos. and bell., in facial neuralgia. 10. Give laryngeal and tracheal symptoms of causticum, phosphorus and spongia.

ECLECTIC MATERIA MEDICA.

1. Give indication where you would use an acid and where you would use an alkali. 2. Give botannical description of aconite, its preparations and indications for its use. 3. Name five antiseptics, and give the indications for their use. 4. Give the indications for the use of santonine. 5. Give specific indications for the use of bryonia. 6. Give indications for the use of jaborandi. 7. Name 5 diuretics and give indications for their use. 8. Give the specific indication for the use of lobelia. 9. Give the indications for the use of pulsatilla, ergot, ustillago, maydis and black haw. 10. Give treatment and antidotes for poisoning from laudanum, carbolic acid, rough on rats, atropin, coal-tar products and strychnin.

ECLECTIC THEORY AND PRACTICE.

1. Diagnose and treat a case of chronic cystitis. 2. What is meant by the specific indication of remedies? 3. Name six remedies you will use as antiseptics. 4. Diagnose and treat a case of chronic intermittent fever. 5. Diagnose and treat a case of anemia. Differentiate it from chlorosis. 6. Give your treatment for croup. Diagnose a case of croup. 7. Describe a case of acute bronchitis. Differentiate it from pneumonia. 8. Treat a case of puerpural fever in its incipiency. 9. What remedies do you use in reducing temperature? Give special indications for four such remedies. 10. When are cathartics indicated? Name three with their indications.

CHEMISTRY AND TOXICOLOGY.

1. What is atomic weight? 2. Give the equivalents in Troy weight of 1 gram, 1 kilogram, also in grams of 1 grain and 1 ounce troy. 3. What are the compounds of Ca. with Cl., Br., and I? 4. What is nitrohydrochloric acid? 5. State the symptoms of acute poisoning by phosphorus. 6. How does Co. act as a poison? 7. When to a solution of lead salt potassium chromate is added what is formed. 8. What is an antidote for acute poisoning by Hg. Cl. 9. When oil of turpentine is treated with sulphuric acid what results? 10. How are blood and pus best detected in the urine?

OPHTHALMOLOGY, OTOLOGY, RHINOLOGY AND MEDICAL JURISPRUDENCE.

1. Differentiate iritis and glaucoma and give treatment of each. 2. Describe and give treatment in full of (a) phlyctenular keratitis; (b) interstitial keratitis; (c) perforating ulcer of the cornea, and possible sequela of the latter. 3. In a patient suffering from ear trouble how would you test his power of hearing? 4. Give the differential diagnosis between acute inflammation of the middle ear and mastoiditis. 5. Diagnose Meniere's disease. 6. Give diagnosis and treatment of enlarged turbinates, adenoid and give differential diagnosis. 7. Differentiate between a benign and malignant growth of the nose. 8. In a medicolegal sense what constitutes a dying declaration and what is necessary to make it evident in a court of justice, and how should it be taken? 9. Define idiocy, imbecility and cretinism.

HOMEOPATHIC THEORY AND PRACTICE.

1. Differentiate narcotic poisoning, drunkenness, uremia, and concussion. 2. Differentiate nervous dyspepsia, cardiac dyspnea and asthma. 3. Give the clinical signs or appearances, diagnostic of typhoid fever, stating the approximate time of the appearance of each. 4. Give the differential diagnosis of renal hepatic colic and appendicitis. 5. Give the causes of orchitis, and treatment. 6. Give the symptoms and homeopathic treatment of sunstroke. 7. Give the differential diagnosis between scorbutis and purpura hemorrhagica, and give treatment of each. 8. Give the differential diagnosis between acute endocarditis and pericarditis, and give the principal causes of each? Give the etiologic factor, avenue of entrance, source of infection, mode of dissemination and preventive measures to be adopted in lobar pneumonia. 10. On what signs would you base a diagnosis of large left-sided pleural effusion, without resorting to exploratory puncture? What is the etiology of this disease?

ANATOMY AND HISTOLOGY.

1. Give the origin and distribution of the jugular vena. 2. Describe the cardiac circulation. 3. Give the names of the tenth nerve, also origin and distribution. 4. Describe the fetal circulation. 5. Name all the bones of the foot, beginning with the ankle. 6. Describe the portal circulation. 7. Name the structures to be divided in operating for strangulation of an oblique inguinal hernia. 8. Give the histology of the heart. 9. Give the histology of the kidney. 10. Give the histology of the spinal cord.

OBSTETRICS AND GYNECOLOGY.

1. Write two pages on deformity of the pelvis. 2. Placenta praevia—causes, symptoms and treatment. 3. Puerperal eclampsia—premonitory symptoms of the attacks, and conditions between attacks. 4. Puerperal septicemia—give treatment in full. 5. Give the complications that you may have in the different presentations. 6. How would you treat a retained placenta at full term? 7. How would you treat a fibroid tumor of the uterus? 8. Give a number of complications that may follow confinements, and give treatment for them. 9. Write two pages on the use of the forceps. 10. Pelvic cellulitis—diagnosis and treatment.

PATHOLOGY.

1. What pathologic conditions do we have in gonorrheal ophthalmia? 2. Describe the structural changes that take place in the spinal cord in locomotor ataxia. 3. Describe the early symptoms after occlusion of the popliteal artery by an embolus or thrombus. 4. Give the pathology and diagnosis of acute and chronic pericarditis. 5. Give the pathology and diagnosis of each: Scarlet fever, pneumonia and pertussis. 6. Give the pathology of acute and chronic endocarditis. 7. Describe the usual pathologic lesions in diabetes mellitus. 8. Give the pathologic and bacteriologic characteristics of tetanus. 9. What are the anatomic lesions of enterocolitis in children and of acute and chronic dysentery? 10. Describe tissue repair as exemplified in the healing of a skin wound with the loss of substance.

Oklahoma June Report.—Dr. J. W. Baker, secretary of the Territorial Board of Medical Examiners, reports the written examination held at Guthrie, June 27, 1906. The number of subjects examined in was 9; total number of questions asked, 90; percentage required to pass, 66 2/3 in each branch. The total number of candidates examined was 45, of whom 35 passed, including one undergraduate, and 10 failed, including 4 who were admitted to examination under the 10-year practice act. The following colleges were represented:

College.	Year. Grad.	Per Cent.
PASSED.		
University of Arkansas	(1906)	80.1
Georgetown University	(1905)	82.2
Northwestern University	(1906)	80.2, 80.
Indiana Medical College	(1906)	86.2
Keokuk Med. Coll., College of P. & S. (1888), 76.7; (1901) (1906) 81.3.		90.8;
University of Louisville	(1906)	77.8
University of Kentucky	(1905)	82.
Kentucky School of Medicine	(1894)	73.2
Tulane University	(1906)	83.8, 83.8
Maryland Med. Coll.	(1905)	78.4
Hahnemann Med. Coll., Kansas City	(1906)	75.7
Epworth-Central Med. Coll.	(1906)	78.1
Barnes Med. Coll. (1893) 65.7; (1901) 71.2;	(1906)	73.2
Washington University, St. Louis	(1901)	77.5
St. Louis University (Marion-Sims Beaumont Med. Coll.)	(1905) 70. (1906)	71.7
Kansas City Med. Coll.*	(1901) 73.2 (1905)	82.2
University Med. Coll., Kansas City.	(1906) 78.4, 78.4, 78.7	80.
North Carolina Med. Coll.	(1906)	75.
Medical College of Ohio	(1890)	77.8
Meharry Med. Coll.	(1905)	66.1
Physio-Medical College of Texas	(1906)	71.8, 81.8
Fort Worth University	(1906)	82.2
FAILED.		
Hahnemann Med. Coll., Chicago	(1882)	75.2
Rush Med. Coll.	(1874)	59.1
Physio-Medical College of Indiana	(1890)	50.
University of Louisville	(1893)	67.8
Louisville Med. Coll.	(1893)	71.4
University of Nashville	(1906)	69.5

* Merged with the University of Kansas.

Medical Organization

DEFECTIVE ORGANIZATION IN TENNESSEE.

By J. N. McCormack, M.D.

Chairman of the Committee on Organization of the American Medical Association.

BOWLING GREEN, KY.

In the absence of the Councilor system in Tennessee an extended itinerary was kindly planned for me by Drs. Savage, McSwain and Miller, who have general supervision of the work of organization in the central, western and eastern grand divisions of the state respectively. The appointments covered full four weeks, but, on account of important matters pressing for my attention before the legislature of my own state, they were arranged with intervals of one or more weeks between those made in the sections named. They were for Gallatin, Springfield, Winchester, Clarksville, Huntingdon, Jackson, Somerville, Memphis, Union City, Trenton, Paris, Chattanooga, Cleveland, Knoxville, Morristown, Bristol and Johnson City. No meeting was held at Winchester as it was impossible to find any physician in the town except one who had retired from practice, although two from out in the county and a number of ladies had assembled in the unwarmed courtroom in response to the newspaper invitation. In order to make up for this, hurriedly called but fairly well attended meetings were held at Covington and Humboldt.

Unfortunately for its own best interests, probably, Tennessee was the first state to act on the new plan of organization, almost before the ink was dry on the first issues of the constitution and by-laws. Under their old system the judicial council, composed of the ex-presidents, had virtual control of all legislative and business matters, including changes in or amendments to the constitution and by-laws. With natural doubts as to the expediency and practicability of what was being proposed by the Association and urged by me in person, their judicial council was retained as a substitute for the comprehensive Councilor system of the standard plan, which has proven so effective in organizing, and especially in maintaining the interest in county societies in other states.

Even with this handicap, under the leadership of Dr. Savage and his colleagues in the two other divisions, a great revival of professional interest followed the reorganization. Outside of the counties containing large cities few societies existed, the total membership was small, and nearly every professional interest was at low tide. Almost entirely by correspondence, societies were rapidly organized in nearly all of the more populous counties, and in one year's time the membership had grown to over 1,000. There, so far as I could gain information, things came to a standstill in a large majority of the counties. The purposes and possibilities of a real, compact and practical organization of the profession had never been personally explained to them, and, in the absence of the Councilor supervision provided in other states, where an active, trained leader visits each county in a small and conveniently organized district by special appointment as often as is practicable, and advises and stimulates its society in the light of his larger experience, broader information and greater enthusiasm, and in the absence of a state journal as a constant means of communication between the county societies themselves, and between them and their state officials, a great many of the county societies soon existed only in name, and for the purpose of holding membership in the Tennessee State Medical Society. In such counties the meetings were held at long or irregular intervals, and in a number, with a large medical population, no meetings had been held for a year or more, and, without a well kept card index or other directory, it was difficult to call meetings. For this reason, probably, while both the professional and lay attendance at my meetings was generally fair for the towns or cities, that from the country districts was small in most counties. In most sections also there was the usual jealousy and lack of coöperation, and the low fees and defective business methods, inseparable from an unorganized profession, and in some these were so pronounced as to be a matter of public reproach. This was true in some counties where the profession was strong, where both the profession and public took an active and intelligent interest in the reforms which the Association is proposing, and where organization ought to be comparatively easy under a proper system.

A gratifying and notable exception to the conditions above named was found in the Nashville Academy of Medicine, the Society of Davidson County. This is by far the best local organization I have found south of Mason and Dixon's line. It meets weekly, has an excellent program, arranged in advance for the year, the papers and discussions are in keeping with their strong profession, and the general harmony and good feeling—ascribed by all, so far as I could learn, to the work of the Academy—was most commendable. It is recognized that the membership can be increased, and the usefulness of the organization greatly extended in other ways, and I found the spirit existing there to do these things. Exception should also be made to a degree of the societies at Clarksville, Murfreesboro, Covington, Bristol, Memphis, Chattanooga, Cleveland and Paris, but none of these impressed me that they were living nearly up to their opportunities for usefulness, or that many of their leaders had caught the real spirit of organization and coöperation in the modern sense.

As in my own and most other western and southern states, the question of reform in medical education here is one pressing for solution. There are eight schools in active operation, and a new one is just being organized at Memphis. The entrance requirements are still in the hands of the faculties, with all that this means, and in some of them the requirements for graduation are not exacting. The necessity for consolidation is as great here now as it was in Cincinnati, Indianapolis, St. Louis, and Kansas City, and as it is in Louisville, Baltimore and Chicago, but I was unable to hear of any movement on foot in this direction.

There is also great need for improvement in their medical legislation. Dr. Happel and his colleagues have done excellent work in gradually raising the standard of requirements, and the law works well and is probably sufficiently exacting under present educational conditions for those who desire to practice medicine honestly. There is no workable authority given, however, for revoking certificates, and the state is a paradise for quacks and street fakers of every description. The board has the confidence and support of the profession throughout the state, and, with systematic organization, it ought not to be difficult to secure such amendment and enforcement of the law as would put an end to this condition of affairs. Improvements are likewise needed in the health laws, state and local. The State Board of Health has ample authority in the emergency of an epidemic, but its power is defective, and its local machinery is very imperfectly organized, for handling the more important, because far more common, domestic pestilences which are always present in some section, and

which contribute so largely to the preventable sick and death rate. I received the impression also that, although probably equally deserving it, the State Board of Health has made little effort to keep in the same close touch with the State Medical Society as the State Board of Medical Examiners had done.

I received such courtesy and hospitality on every hand, even in counties where there was the least organization, that I am reluctant to record anything of my visit which is not commendatory. I conceive it to be my duty, however, to write and advise critically, frankly, albeit kindly, of conditions as I find them, in the hope that improvement may follow. Influenced by this spirit entirely, candor compels me to say that I found little real organization in Tennessee outside of the counties named, and that it was very imperfect in some of these. It is a great state, with strong men in nearly every county. Nowhere else have I found both the profession and people more responsive to appeals for a new order of things. With a proper Councilor system, and with an active state journal, and the power and enthusiasm which these would bring, the membership ought to be doubled easily in a year, most of the county societies could be vitalized and made the agencies or sources of strength and influence they were intended to be, and the reforms indicated, so important to both the profession and people, would soon be started.

Travel Notes

DISEASES AND HOSPITALS OF THE EAST COAST OF AFRICA.

NICHOLAS SENN, M.D.

Professor of Surgery in the University of Chicago; Professor and Head of the Surgical Department, Rush Medical College.

CHICAGO.

(*Continued from page 226.*)

Beira, East Coast of Africa, June 5, 1906.

MEDICAL ZANZIBAR.

Zanzibar is a sultanate of East Africa under British protection. The island is near the African coast, the channel separating it from the mainland, being only twenty-seven miles wide at its narrowest point. It is fifty miles long, on an average thirty miles wide, and has a very mixed population of 150,000, of whom nearly one-half live in the city of Zanzibar. The island is of coral formation, having a thin layer of sandy soil with a layer of clay between it and disintegrating coral rock. In the interior, low wooded hills break the monotony of the scenery; vegetation everywhere is luxuriant. It is the island of clove-tree groves and the cocoa palm flourishes wherever it is planted. The prosperity of the island has suffered since slavery was abolished in 1895. Thousands of the old slaves remain with their masters, but all children born since the act abolishing slavery came into force are free. At one time Zanzibar was the greatest slave market in the world. This vile business was conducted chiefly by Arabs, many of whom accumulated great wealth by stealing, buying and selling slaves. The site of the former slave market is now occupied by the fine cathedral of the English church and the Universities Mission Hospital. About 150 whites, 5,000 Arabs and 10,000 Eastern Indians make up the foreign population.

CLIMATE.

Since our arrival at Mombasa there has been very little change in the atmospheric conditions. Most of the time the sky has been cloudy and rain has been almost a daily occurrence. The thermometer in the shade continued to range between 79° F. and 87° F., and the air has been saturated with moisture. Strangely enough, even during pouring rains, thunder and lightning have been absent. The climate of Zanzibar has been carefully studied by Dr. Friedrichsen during his long residence on the island. He published an important article on this subject in 1901, from which I will quote briefly. The air temperature is generally very high and without much variation. The medium temperature for the years 1898-1899 was 26.9° C., maximum, 31.50° C., minimum 22.60° C. The relative and absolute moisture of the air is very considerable, especially during the rainy season, during which he observed dew and fog, with a temperature of 27° C. The sky, except during the hottest season, is, as a rule, slightly cloudy. Heavy clouds appear during the monsoon change. The average rainfall varies from 140 to 160 cm. More or less rain falls during every month of the year; but the heaviest rains occur during the months of March, April and May. Thunderstorms are very rare and only during the change of the monsoon. The prevailing winds are from the southwest and southeast, and during the monsoon, from the northeast. Cyclones are very rare, the last one having occurred during the early seventies.

PREVAILING DISEASES.

In another publication the same author gives a short account of the prevailing diseases of the island. The city is abundantly supplied with pure water from a small river. Many of the natives obtain their drinking water from shallow wells on an average 10 to 15 feet in depth. Some of the houses of the Europeans have tanks for rain water. Contents of cesspools and all waste materials are removed in hand carts and deposited outside the city limits.

Malaria is the most important and most prevailing disease. It is expected that every new-comer from Europe will suffer from fever some time during the first year of continuous residence here. Men are more liable to fever than women and children. Malaria prevails at all times of the year, but occurs most frequently during the latter part of November and December and during April, May and June; that is, during the two rainy seasons. In the European the fever generally pursues a comparatively mild course. During the first and second day the thermometer usually reaches 39.5° to 40° C. If treated promptly with quinin the attack is over in from five to seven days. During this time there is a loss in body weight of from five to ten pounds. This form of fever is generally of a remitting type. Pure intermittent fever is much less frequent. In negroes and Arabs the fever is more severe than in Europeans.

Black-water fever is rare and attacks only Europeans, the subjects of neglected malaria.

Infantile debility. Children of European parents do not prosper well during the first few years. They remain in poor flesh and are pale, in spite of the utmost care to maintain their health.

Dysentery seldom attacks Europeans, but is very prevalent among the negroes and the Arabs, and is quite fatal, especially during the rainy seasons.

Hepatitis and *abscess of the liver* do not occur or are, at least, very rare complications of dysentery.

Beriberi is endemic from time to time, and has proved fatal in a few instances.

Smallpox epidemics make their appearance every few years, and Dr. Friedrichsen believes that three-fourths of the colored population have at some time suffered from this disease. From the many scarred faces I saw on the streets, in shops and market, I believe his estimate is not too high. During the severe epidemic in 1897, 2,000 deaths occurred from this disease in the short space of three to four months. Since that time the government has received vaccine virus from Paris and London every month and encourages, but does not enforce, vaccination. During the smallpox epidemics the negroes inoculate themselves with the disease, taking the virus from the pustules, the operation being performed by a "zanaga" (medicine man, sorcerer). Those inoculated contract the regular smallpox.

Lepra occurs, but is not widely diffused. The whole number of lepers in Pemba and Zanzibar is estimated at 200.

Syphilis is common and widespread, and in the blacks, who seldom apply for early treatment, it often pursues a very severe course.

Elephantiasis is quite common among the negroes, Arabs, and East Indians.

Acute infective diseases. Of these diseases are enumerated measles, influenza, whooping cough, tetanus and puerperal sepsis (frequent in East Indian women).

Pulmonary tuberculosis is very common among the Arabs and East Indians, less so among the negroes.

Cholera has not visited Zanzibar since 1860.

Sandflea. Since 1898 the sandflea has become a pest for the blacks. It often happens, especially in syphilitic subjects, that those infested with this insect lose one or more toes, in consequence of a violent, rapidly spreading inflammation which terminates in gangrene.

Skin diseases are common and much more so in the blacks than in the whites. Tropic ulcer, which always has its seat on the extensor side of the leg, is a very common affection among the poor Arabs and negroes who walk about barelegged and barefoot.

Sleeping disease. This disease has never been known to originate in Zanzibar. Two patients, both of them negroes, came from Africa affected with this disease. The morning temperature was normal; evening temperature, 37.5 to 38.5 C. Hebetude and somnolence were the most prominent symptoms. In one of the cases lumbar puncture was made and in the clear fluid removed trypanosomes were found. The patient died the next day. In the other case these parasites were detected in the blood during the life of the patient.

A CASE OF GOUNDOU DISEASE IN ZANZIBAR.

Dr. Friedrichsen has also given an account of a case of goundou disease in a paper under the title, "Symmetrical Swelling of the Nose in Tropic Countries," to which he added an extensive literature on this subject. It was the first case observed on the East Coast of Africa and the only one at the time the report was made. The disease was first mentioned and described by MacAllister and Lamprey, in 1882, under the heading, "Horned Men of Africa." It is most frequently met with in the tropics of the West Coast of Africa, but has also been observed in the West Indies, Java, Sumatra and China. In most instances, if not in all, the disease affects syphilities and the nasal affection is preceded by ulcers in the nares. The tumors consist of spongy bone and must be regarded as the product of a chronic plastic periostitis of the nasal process of the frontal bone, usually, if not always, of a specific nature. Dr. Friedrichsen's patient was a Swahili boy, twelve years old, who was born in German East Africa. He was unusually small for his age. He was brought by his parents to Zanzibar when he was three years old, and has never left the island since. His disease began soon after coming to Zanzibar. It commenced with a swelling of the legs and "buba" (Swahili for framboesia). In the course of this disease, large ulcers appeared on the legs and on the back, which left large scars. Shortly after he was attacked with smallpox. About two months later, ulcers formed in the nose which bled often. The nasal breathing became difficult. Slowly a swelling made its appearance at the base and the side of the nose, first on the right, then on the left side. At first the growth was very slow, later it increased more rapidly in size. These swellings, in the course of time, developed into real tumors springing from the nasal process of the frontal bone. Above they extend as high as the internal angle of the eye, their lower margins to within a finger's breadth of the alveolar process, and laterally a finger's breadth from the tuberosity of the maxilla. In the median line, they are separated by a furrow over the nasal ridge. The nasal bones are not involved. The surface of these tumors is smooth, the skin movable and intact. The form is oblong; laterally very prominent, and on the inner side sloping gradually to the level of the nasal bone. The consistence of the tumors is of a bony hardness. They are somewhat tender on pressure and percussion. They enroach on the lumen of the nasal passage, narrowing it. The septum is free. Between the lips and alveolar process, the one on the left side can be felt; the right one is beyond the reach of the palpating finger in the mouth. The mucous lining over the tumors is swollen, at different points almost polypoid, and tender to the touch. There is a scanty, serous discharge from the nose. Both tibiæ are curved forward, the right one enlarged in the middle and tender on pressure. Below the first are several ulcers, the seat of a foul discharge. The teeth are irregular and crenated. The cervical and epitrochlear glands are enlarged, but not tender. This patient was evidently the subject of a grave form of hereditary syphilis on the basis of which this strange form of tropic plastic periostitis engendered itself. There can be but little question as to the direct etiologic relationship of constitutional syphilis to goundou disease, but there are evidently climatic or dietetic influences which are concerned in exciting the periostitis. I have just learned from an eye-witness, a German officer, that an identical case was operated on two months ago at Muansa, German East Africa, by Dr. Radloff. The patient was a girl 14 years old. The operation was successful and the result satisfactory.

HOSPITALS.

The city of Zanzibar has three hospitals and a leprosery.

St. Joseph's Hospital.—This hospital is the oldest, largest and most influential. It is under the care and management of twelve Sisters of St. Joseph, with Sister Lucie at the head. Sister Lucie served her order fifteen years in America, and has been connected with this hospital in her present capacity for many years. These sisters are at the same time in charge of the leprosery. The original cost of the hospital, built twenty years ago, was about $30,000. It is a large, square, solid two-story building (Fig. 1) on the beach facing the harbor, with a small garden in front of the main entrance. It has accommodations for forty patients who are divided into three classes. The hospital has ten private rooms, and each occupant pays $2.50 per day. The patients of the second class are placed in small private wards, and pay what they can, and the third class is made up of the charity patients, almost exclusively blacks, who by far outnumber the pay patients. The demands made on the hospital by the sick poor make the struggle for

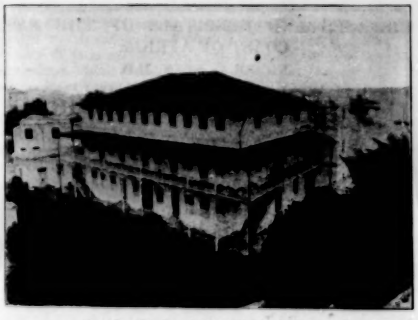


Fig. 1.—St. Joseph's Hospital, Zanzibar.

existence often difficult. The hospital has no regular staff, but any physician is privileged to attend his own private cases. Dr. Friedrichsen, the only German physician residing in Zanzibar, has the bulk of practice in the hospital. The hospital has neither an operating room nor instruments. If an operation is to be done, it is performed in the patient's room or ward, and the physican must make the preparations and bring his own instruments. No wonder that under such circumstances, physicians refrain from performing capital operations when they are not urgently indicated.

Military Hospital.—The military hospital consists of several one-story cottages within the enclosure of the barracks. It is in charge of the government physician, Dr. McDonald, who at the same time is the health officer and supervises the battle against bubonic plague and other tropic diseases. The hospital has thirty beds. It is intended for the government officials and soldiers, but its doors are also open for the native sick poor, including women and children. The wards are plainly furnished, but clean. The nursing is in charge of an English trained nurse. She makes this hospital her headquarters, but does private nursing besides. In her hospital work she is assisted by orderlies of the hospital corps. Like the other hospitals in Zanzibar, there is no room set aside for operating. The most interesting feature of the military hospital is the small bacteriologic laboratory in which blood examinations are made and from which the battle against

recurrence of the plague is conducted by Dr. McDonald. The last serious invasion of Zanzibar by the plague has stimulated the government and health authorities to resort to energetic measures to prevent a repetition of the epidemic. The war of extermination on rats has been waged since the epidemic made its appearance, and is now in active operation. Every day 1,000 pieces of bread, cut in the form of small squares and charged with an arsenical preparation, are distributed all over the city in places frequented by rats. The government, besides, pays a small amount for live rats caught and brought to the laboratory. From 200 to 300 rats are secured in this way every day. The spleen of every rat is examined microscopically for the plague bacillus. At present only three-fourth of one per cent. of the rats are found to be infected. This precaution against one of the most dreaded diseases of the coast is timely and will minimize the risks of future recurrence. During the prevalence of the disease Haffkine's serum was used on a large scale and contributed largely to the limitation of the extention of the disease and in cutting short the duration of the epidemic.

The Universities Mission Hospital.—This hospital, the most modern one in Zanzibar, has room for thirty patients. It is located adjoining the cathedral of the Church of England. It is in charge of Dr. Francis Charlesworth, who has lived in Zanzibar twenty years. The patients are cared for by five trained English nurses. The private rooms and wards are comfortably furnished and are kept scrupulously clean. The central court and porticos of the two-story substantial building add much to

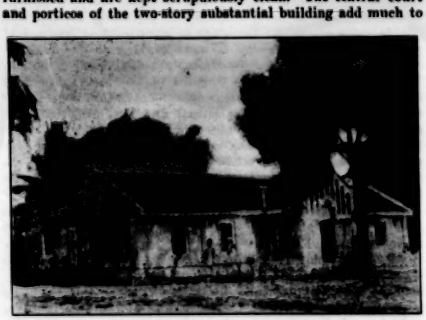


Fig. 2.—Zanzibar Leper Asylum.

the comfort of patients by the free admission of the sea breeze. Most of the patients are blacks, who are cared for by the mission. The operative work is light, as the natives, who are not often affected with surgical diseases, have a strong aversion to operations. In the absence of an operating room proper, a room on the first floor is cleared and made use of for this purpose. Dr. Charlesworth, in his long experience, has never seen a case of appendicitis or carcinoma among the negroes.

Thanis Topan Hospital.—This is a veritable *lucus a non lucendo*. Many years ago a wealthy East Indian merchant, by the name of Lewa Hadji, made a donation of about $50,000, to be expended in the building of a hospital for the blacks, and to be known by the above name. A building on too large a scale was commenced, and when the money gave out it was never completed, and the unfinished structure remains as a silent witness of lack of foresight and good judgment of those who had charge of the fund.

Zanzibar Leprosery.—The Zanzibar Leprosery (Fig. 2) is a government institution, located in the country, about two miles from the center of the city. It consists of six one-story stone cottages, roofed with corrugrated iron, and a few native huts made of sticks and palm leaves, all in the same barbed-wire inclosure. The huts are occupied exclusively by women. The buildings occupy the summit of a low wooded hill, surrounded by several low, marshy places, excellent breeding grounds for the anopheles. The entrance door is kept locked so as to prevent the wandering away of the inmates. The institution is managed by the Catholic Mission, and the patients are taken care of by five sisters of the St. Joseph's Hospital, who spend the day here, but return to the hospital in the evening. In their absence order is maintained and the needs of the patients attended to by native helpers employed for this purpose. A physician visits the hospital at stated intervals or when his services are required. The number of inmates at this time is 47, 24 men and 23 women, all negroes. The youngest patient is a girl 15 years old. Among the patients of both sexes, I noticed several who, from their appearance, were near to or over the seventies. The anesthetic and tubercular forms are about equally represented. Many affected with the anesthetic form had lost their fingers and toes. Several were nearly blind, two had marked facial paralysis, and one, a man advanced in years, who had suffered from the anesthetic form for twenty years, was insane. His eyes were staring, and the muscles of his face, more especially the labial, were constantly twitching. The type of insanity was happy and hilarious; the patient laughed and talked alternatively and gesticulated wildly with his mutilated hands. I was somewhat astonished to find that the sexes were not separated, men and women mingling freely with each other. The wards are clean, but the furnishings are of the simplest, cheapest kind. Segregation, in a strict sense of the word, is not enforced on the island. So far as I could ascertain, if a leper is found, he is apprehended and sent to the leprosery. The exact proceedings for commitment I could not learn. The location of the leprosery is bad, as it is in a very malarial surrounding, and some of the sisters have contracted a severe form of malaria, including black-water fever, which has proved fatal more than once. The lepers themselves appear to be almost, if not entirely, immune to malarial infection. The leprosery should be on the near-by seacoast, where the patients could enjoy the sea breeze and surf bathing. The grounds should also be large, to give those who are able to work, outdoor employment, which would not only exercise a good influence on their mental and physical condition, but would also contribute something to the financial support of the institution.

Society Proceedings

COMING MEETINGS.

American Orthopedic Association, Toronto, Canada, Aug. 20-21.
British Medical Association, Toronto, Canada, Aug. 21-25.
American Roentgen Ray Society, Niagara Falls, Aug. 29-31.
Am. Acad. of Ophthal. and Otol., St. Clair, Mich., Aug. 30-Sept. 1.
Medical Soc. of the Missouri Valley, Council Bluffs, Iowa, Sept. 6-7.
Med. Soc. of the State of Pennsylvania, Bedford Springs, Sept. 11-13.
Washington State Medical Association, Spokane, Sept. 11-13.
Assn. of Military Surgeons of the U. S., Buffalo, N. Y., Sept. 11-14.
Am. Assn. of Obstetricians and Gynecol., Cincinnati, O., Sept. 20-22.

AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.

Twelfth Annual Meeting, held in Kansas City, Mo., June 11-13, 1906.

(*Concluded from page 230.*)

Case of Stammering, Illustrating the Importance of Early Treatment.

Dr. G. Hudson Makuen, Philadelphia, reported two instances in which phonetics were largely used and dietary restrictions were imposed, and the children carefully watched, resulting eventually in recovery.

Herpes Zoster Auris.

Dr. Derrick T. Vail, Cincinnati, reported a case in which this rare condition occurred and in which the very terrific pain which nothing was able to relieve seemed diagnostic. The blebs formed behind the ear in the mastoid region. He came to the conclusion that herpes zoster auris was like true zoster elsewhere, a definite disease usually running an acute course; that it is very rare, but has been observed by a number of noted authorities; that it may involve the membrana tympani, as well as deeper parts of the auditory canal; that

it is an acute infectious disease, causing neuritis, the storm center being in the ganglion of a sensory nerve; that lymphadenitis is almost invariably present and probably precedes the attack; that the treatment is of little avail, the disease usually running a rapid course and healing spontaneously.

DR. E. M. HOLMES, Boston, saw a case occurring in a woman, 30 years of age, with a perfect past history. The pain had been intense for over two hours. It was of a neurotic and spasmodic character. Examination of the ear showed nothing abnormal, as did the nose and throat. He was at first inclined to think it was a reflex pain from a tooth. Morphia was administered in large doses, but the pain persisted. Heat and cold was tried, but nothing relieved it. In thirty-six hours blebs began to form; the pains subsided in a few days and then began again. Three months later she showed a general herpes extending over several intercostal nerves. He failed to find a cause, and thought the ganglion theory rather hard to prove.

DR. W. C. PHILLIPS, New York, thought that herpes appearing about the ears is as common as the same affection appearing in other parts of the body.

Treatment of Tuberculosis of the Upper Air Passages and the Ear.

DR. W. C. BANE, Denver, divided the treatment into constitutional and local. He placed great importance on rich blood as the destroyer of the tubercle bacilli, hence the importance of a full nourishing diet. Forced feeding with rest, and guaiacol and creosote and calcium chlorid are the best aids. For the local treatment of tubercular laryngitis a 4 per cent. solution of resorcin is very beneficial. The most efficient remedy at the present time is formalin. Its administration should be preceded by an application of a 5 or 10 per cent. solution of cocain or beta eucain. As a local anesthetic, orthoform, inhaled or insufflated is of value.

DR. ROBERT LEVY, Denver, said that surgical measures are controlled by the character of the lesion, their nature, extent, and other complications, whether primary or secondary, and by the limitations placed on the possibility of early diagnosis; that all cases of chronic suppuration of the middle ear in tuberculous individuals are not necessarily tuberculous; that the objects of surgical measures in tuberculosis of the ear are the removal of all available foci of disease, the removal of diseased bone and the establishment of drainage; that tuberculosis of the nose responds readily to surgical treatment, the methods used being curettement and excision by cold wire or galvanic cautery snare; that pharyngeal tuberculosis is a manifestation of the most asthenic form of the disease, presenting all conditions which contraindicated surgical intervention; that operative intervention in pharyngeal tuberculosis is only palliative; that in laryngeal tuberculosis, deep incisions are valuable in edema and in uniform firm infiltration, their usefulness being increased by rubbing with lactic acid; that excision of tuberculous deposits is limited to those cases in which there is a certainty of completely removing the entire disease focus; that the extent of the involvement is often greater than can be determined by laryngoscopic or macroscopic examination; that curetting is valuable in ulcerations and soft excrescences, the character of the ulceration, however, modifying its applicability; that repeated and extensive operations can be performed, provided the lesions develop progressively; that the galvanic cautery is useful in small, easily accessible tuberculous ulcerations; that tracheotomy might prove of value in children and is always indicated for the relief of dyspnea; and that laryngectomy is probably never indicated.

DR. LEVY, New York, emphasized strongly the necessity of giving tubercular patients the benefit not only of medicinal and surgical, but also of climatic treatment. That if, after thorough trial, the patient does not do well in one climate, he should be sent to another. He does not think it wise to become pessimistic after having tried one specific kind of climate or treatment without success; that whatever the method of treatment, the physician should constantly maintain a spirit of optimism which would be an inspiration to both himself and his patient.

DR. J. E. LOGAN, Kansas City, emphasized the point that general tuberculosis or of the air passages varies so greatly in different parts of the country that it is hard to make a separate division of treatment. The cardinal principle should be to maintain the general systemic condition.

DR. W. C. PHILLIPS, New York, has no doubt that the greater percentage of chronic purulent affections of the ear are of tubercular origin. He has experienced great difficulty in making the diagnosis of tubercular conditions of the ear. The microscopic discharges, on examination, do not reveal the presence of the tubercle bacillus. A diagnosis can never be made positively except by culture experiments.

DR. H. BERT ELLIS, Los Angeles, thinks that if the diagnosis is made early, the local, surgical or climatic treatment will result favorably.

DR. H. W. LOEB, St. Louis, operated on cases of tuberculosis of the larynx with slight abatement of the symptoms and slightly increased length of life, but came to the conclusion that he would not interfere surgically in these cases. One patient treated in this way lived seven years and died later of tuberculosis of the lungs. The patient stands a better chance if he is sent to the proper climate and then is operated on.

Ether Narcosis by Rectum.

DR. J. A. STUCKY, Lexington, Ky., reported four cases in which this method was used. The patient passes under the influence of the drug rapidly and with no sense of suffocation; less ether is used, not only in producing the narcosis, but in maintaining it; the stage of excitement is lessened or absent; the ether recovery is more rapid, and the disagreeable after effects of ether inhalation are diminished or absent. The use of this method in diseases of the lungs, especially tuberculosis, abscess and pneumonia immediately suggests itself; also in empyema, mediastinal and new growths. The greater part of the ether is also eliminated through the lungs, the direct irritation of the concentrated vapor is overcome and postoperative pneumonia should be lessened. The absence of bronchial secretions and vomiting has been a striking feature.

The apparatus used was suggested by Cunningham and consists of a bottle, the body of which is 7½ inches in height, 5 inches being used for ether space, 2½ inches and the neck for vapor space; the diameter is 4 inches and the capacity in the ether space 20 ounces, so that a large amount of ether may be used without materially lowering the ether column. The afferent tube which leads to the bottom of the ether column ends in a bulb with several small perforations so that air ascends in several small bubbles. The stopper and connections should be tight. The bottle is placed in a water bath at a temperature between 80 and 90 F. Ether boils at 98.6 F. The efferent tube should be long enough to allow moving the wash bottle away in case the operator desires to change his position. A stiff rectal tube with a single eye at the end is used. The patient is placed on his back with the legs in slight flexion, and the tube is inserted for a distance of from 10 to 14 inches. The efferent tube is connected with a rectal tube and the vapor is forced in until considerable gas is pressed around rectal tube. Keeping the forefinger in the rectum, unless it causes pain, hastens the expulsion of rectal gases. It is essential that the rectum be distended to the point of emptying itself around the tube, for without removing the gas normally in the bowels the patient absorbs the ether much more slowly. After the gas has been expelled, the ether should be forced in by a few squeezes of the bulb, every five or ten seconds, or until it is expelled about the tube.

The breath becomes ether laden in from one to five minutes, and the patient becomes drowsy, the breathing stertorous and he passes into complete surgical narcosis without a stage of excitement. After narcosis is complete two or three squeezes of the bulb a minute will keep it so, and the position of the tongue should be looked after and watched. If the patient becomes too profoundly anesthetized the efferent tube should be disconnected and such ether as is in the bowel forced out through the rectal tube by abdominal massage. An oxygen tank should be connected with the rectal tube and this gas made to distend the bowel.

AMERICAN ACADEMY OF MEDICINE.

Thirty-first Annual Meeting, held in Boston, June 2 and 4, 1906.

(*Continued from page 229.*)

Manual Training for Medical Students and Instruction in Principles of Psychotherapy.

DR. GERSHOM H. HILL, of Des Moines, Iowa, referred to the present day tendency in business and education toward specialization. While believing that medical education should be technical, he also believed that it should be well balanced and as general as ever before. Since livelihoods to-day are gained with brains rather than with muscle, and life is indoors and sedentary, neurotic conditions, nervous diseases and psychopathic ailments are very frequent. While drugs and surgical operations could cure many diseases, there are many patients suffering from impaired physical or mental ability whose condition was said to be functional. Here it has been demonstrated that great benefit has been secured from baths, massage, osteopathic manipulation, and the application of electricity. Therefore, medical students and internes should be taught more completely how to apply these methods in order that they may instruct nurses and patients.

DISCUSSION.

DR. CASEY A. WOOD, of Chicago, thought that the curriculum of the medical school already is overcrowded. He suggested that the preliminary education of the medical student be extended beyond the time required at present.

DR. WOODS HUTCHINSON thought there was danger of overdoing in mental therapeutics. Admitting the influence of the mind over the body, it is equally true that no amount of confidence in the doctor or nurse would avail in cancer of the stomach, Bright's disease, or diabetes. He believes that the real reason that suggestion does so much is that two-thirds of the patients for whom prescriptions are written would get better at all events.

DR. A. P. CLARKE cited an instance of a patient suffering much pain with general depression of spirits. She had been much encouraged by her own physician who was unable to find important physical derangement. It proved to be a case in which mental science was not applicable, an exploration of the rectum revealing a mass of impacted fecal matter.

Heredity and Environment as Causes of Delinquency and Crime.

DR. DONLY C. HAWLEY, of Burlington, Vt., said that while scientists admit the heredity of physical and psychological peculiarities, the weight of their testimony is to the effect that this phenomenon, while frequent, is not constant. The influences especially opposed to heredity are: (1), Education; (2), the instinct of initiation; (3), the innovative force of individual initiative. In studying heredity a prominent place must be given to the inheritance of acquired characters which are constantly changing through the modifying influences of environment. While a thorough knowledge of the biologic law of heredity is of vital importance, there is need for a wider recognition of the tendency of Nature to "throw back" to the normal or average. Disease is not so much an inheritance as is the tendency to disease. The tendency of the delinquent and the criminal, so far as inheritance is concerned, is to repeat the sins of the fathers under like unhealthful and perverse conditions. Criminals may in some instances inherit direct tendencies to crime. The views of such extremists, such as Lombroso, and especially in regard to the criminal classes, should not be accepted without challenge until better evidence can be adduced to show that the defects are a positive inheritance rather than a result of defective development due to bad environing circumstances, drunkenness, etc. To prevent habitual crime there must be the saving of the young offender from the acquisition of fixed habits of crime, largely the result of degenerate social conditions. Experience in the rescue of the young from conditions of delinquency and depravity seem to point to the fact that heredity has been over-estimated as a cause of these conditions; and that bad environment is oftenest the cause of abnormal physical, mental and moral growth. Future effort in the prevention of delinquency and criminology should be directed to the proper culture of the child. While the full accomplishment of this end may not be realized, factors in the production of delinquency and crime in the young might be greatly minimized.

How May the Medical and Teaching Professions Coöperate to Improve the Moral, Mental and Physical Condition of the Young.

DR. S. A. KNOPF, of New York City, said that the beginning should be made by preventing by law, or by the persuasion of the family physician, the marriage of the idiot, the syphilitic, the acute tuberculous, the chronic insane, and the chronic alcoholic. Also, there should be prohibited by law, factory labor of the pregnant woman at least two months before and one month after childbirth. Only in rare instances should artificial feeding be substituted for food from the mother's breast for the newly born infant. Artificial feeding of the female infant lessens her chances of ability in after life to nurse her own child. Child nursing, cooking and housekeeping should be taught married women ignorant of such attainments. He emphasized the importance of kindergartens, private and public schools having attached thereto school physicians who shall examine the children on admission, inspect them daily, and reexamine them periodically for tuberculosis and other chronic affections, and bad teeth. Until the completion of the seventh year he would not have children enter public schools for regular attendance. The children of the poor should be provided, gratuitously or at cost, with luncheon. The value of breathing and swimming exercises and school gardens was mentioned. Co-education was recommended up to the age of 12 and in the higher schools and colleges after the age of 17. Popular hygiene, physiology and prevention of infectious diseases should be taught in lessons adapted to the age and understanding of the pupil, and embryology and prevention of venereal diseases, he would not exclude, particularly in the higher grades. Attention was directed to the care of the nervous system of the child, likewise of the teacher. For the atypical, mentally and morally deficient he would have separate classes in charge of specially trained teachers. The tuberculous child should be educated and treated in school sanatoria, where the teacher afflicted with early tuberculosis might also find employment. The suggestion was made of a pension for school teachers having contracted tuberculosis in the performance of their duty. No state or municipal sacrifice should be considered too great for the improvement of the moral, mental and physical condition of the young who constitute the future citizens.

Duty of Family Physician in Regard to Proper Mental and Physical Development of Children Under His Care.

DR. DUDLEY A. SARGENT, of Boston, referred to the lessened number of young men adopting medicine as a profession in the past ten years and to the increased number of pharmacists, druggists, osteopaths, Christian scientists, and mental healers of varied discriptions. He suggested that the medical profession should take the public into its confidence, admit the impossibility of curing disease as such, and ask for its sympathetic aid and coöperation in trying to prevent it. The knowledge of the self limitation of most diseases, provided the individual has sufficient resistance, has placed new responsibilities on the medical profession; and when the community once learns that the physician's advice before sickness is often worth much more than his prescription afterwards, it will readily come into more intimate relations with him. Every child in the public schools should be given a thorough physical examination at least once a year, and this yearly examination followed by a daily inspection. Such practice in the cities where it has been followed has shown remarkable exemption from the contagious diseases among school children. The practice should also be extended to factories, department stores, and establishments employing many persons.

The remarkable success of the Health Education League of Boston was referred to as indicative of the possibilities of such a movement. The object of the league is to spread the knowledge of the laws of health by means of literature and lectures and practical talks. Dr. Sargent has seen great benefit in his patients by having them form correct habits of living and relinquish those things which have made them ill. In the light of the present knowledge of the cause of moral,

mental and physical disease he believes that there is a much greater necessity for the physician to make periodic professional calls on his neighbors and patients than for the pastor to do so. Before the physician can assume this function the public must realize the value of preventive medicine and make its practice possible by an assured income to the physician. There should be common sense talks to prospective fathers and mothers relative to physical fitness to rear a family. Those anticipating marriage and known to the physician to be mentally, physically and temperamentally unfitted for each other, should be so informed in the most delicate way possible. A little more common sense advice from the family physician on sexual matters, it was urged, would relieve the gynecologists from overwork, put the divorce courts out of business, and prevent untold misery to thousands.

The responsibility of the physician in giving instruction on the arrival of the first infant was shown. All through the first seven or eight years of the child's life the physician should look to the enhancement of the child's growth and development through its natural activity. In order to guard against the acquirement of school furniture deformities children should be frequently examined by the family physician. At the approach of puberty the children should be talked with by the physician concerning the mysteries of the generative functions. A natural approach to this subject was suggested to be through the nature studies of plants and animals. Up to the age of puberty the mental and physical activities of the boy and girl should be the same; afterward much of this activity should be essentially different. On the question of venereal diseases the family physician should talk very plainly to both sexes. The question of school athletics should be calmly and judiciously discussed with parents and children by the family physician.

(To be continued.)

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, held July 10, 1906.

The President, Dr. Wallace I. Terry, in the Chair.

The society resumed its regular meetings July 10 in Lane Hall, and the attendance was very good, considering the circumstances.

Splenic Anemia.

Dr. Jellinek presented a patient exhibiting an exceedingly interesting condition of anemia, which had been diagnosed as splenic anemia, or Banti's disease. As all the records and history of this case were destroyed by fire, the history, as reported, was from memory. The patient first presented himself to the attention of the recording physician some six or eight months previously, at which time he was exceedingly anemic, the hemoglobin being only about 10 per cent., red blood corpuscles about 200,000 and white corpuscles less than a thousand. Shortly thereafter he developed very severe hemorrhage from the stomach, which recurred at intervals. He was watched very carefully and put on a treatment designed to build up his physical condition. At the time the patient was presented to the society he had hemoglobin about 40 per cent., red blood cells about 2,000,000 and white cells about 1,200. In view of the condition and diagnosis the patient is to be subjected to an operation for the removal of the spleen in about a week.

Adams-Stokes Disease.

Dr. C. M. Cooper reported an interesting case of Adams-Stokes disease, in which a lesion of the bundle of His was demonstrated postmortem. He also presented two patients exhibiting the same phenomena and demonstrated the venous and arterial tracings.

Digitalis and Heart-Block.

Dr. A. W. Hewlett demonstrated tracings showing the heart-block due to administration of digitalis, and called attention to the fact that the use of atropin in connection with digitalis might possibly stimulate the bundle of His and prevent the occurrence of heart-block in cases where it is necessary to administer digitalis, and where this unpleasant symptom follows such administration.

Scopolamin-Morphin Anesthesia.

Dr. W. H. Winterberg presented a paper giving his results in the use of scopolamin-morphin anesthesia. As a result of his experience he believes that this method, when properly followed, is of very great benefit, for even if it is necessary to resort to ether anesthesia a very much smaller amount of the anesthetic is required, and the reaction of the patient would be markedly less.

Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns.]

Acne Papulosa.

In the treatment of this form of acne involving the back and shoulders, Shoemaker in the *Med. Bulletin* recommends the following outline of treatment:

Begin by treating the gastrointestinal tract. Careful attention must be given to the diet and to bathing with hot water and using a mild soap.

The following is recommended internally:

R.	Tinct. nucis vomicæ	
	Acidi nitrohydrochlorici, dil., ää	℥ss 15
	Fld. ext. xanthoxyli	
	Fld. ext. lappæ, ää	℥i 30

M. Sig.: One teaspoonful in water after each meal.

Locally the following combination is of value:

R.	Sulphuris precip.	gr. xxx 2
	Ung. zinci oxidi	
	Ung. aquæ rosæ, ää	℥ss 15

M. Ft. unguentum. Sig.: Apply locally twice a day.

Diarrhea.

The most common cause of diarrhea, according to Yeo in *Clin. Ther.* is local irritation due to some offending substance and secondarily setting up a catarrhal condition of the intestinal mucous membrane. Some attacks of diarrhea are eliminative in character, excited by some toxic substances from the blood, as in cases of uremia. In infancy the too early use of farinaceous foods is responsible for many of the gastrointestinal disorders. One of the important points to observe in the treatment of diarrhea, according to Yeo, whether acute or chronic, is a proper regulation of the diet, together with rest in bed. In all forms of diarrhea those foods containing indigestible residue must be completely eliminated from the diet, using only such foods as will leave an unirritating residue and have no tendency to undergo decomposition into acid irritating substances in the intestine. As to the medicinal treatment this author recommends that the intestine be emptied of any irritating products by means of a mild but efficient cathartic such as the mild chlorid of mercury in two to three (.12/20 gr.) doses. A small dose of castor oil will answer the same purpose. It may, with advantage, be combined as follows:

R.	Olei ricini	℥vi 24
	Pulv. tragacanthæ co.	℥i 4
	Syrupi simp.	℥iv 15
	Aquæ feniculi, q. s. ad	℥iii 90

M. Ft. mistura. Sig.: One tablespoonful every hour or two until relieved. A smaller dose must be given to the very young.

Many of the diarrheas depend on an acid condition of the intestinal contents. In such instances alkaline medicines may be given or a few doses of the following combination:

R.	Sodii bicarb.	℥i 4
	Spiritus ammon. arom.	℥iii 12
	Tinct. cardamomi co.	℥vi 25
	Aquæ cinnamomi, q. s. ad	℥vi 180

M. Sig.: Two tablespoonfuls to be taken every two or three hours until relieved.

There is a great advantage, according to Yeo, in curing a diarrhea by simple means rather than by resorting to astringents and opiates, as opiates greatly interfere with the action of the liver and produce constipation, loss of appetite, headache and other discomforts.

Opium, however, is required in cases in which there is great pain and spasm. It may be given in pill form gr. ½ (.03) of the extract for two or three doses. One must not forget that young children bear opium badly unless given in very small doses, while, at the same time, they may be in need of such treatment owing to the excessive hypersensitiveness of the intestinal mucous membrane.

The following combination acts well in some cases:

℞. Pulv. kino comp. (N. F.) ..... gr. iv | 25
Pulv. cretæ comp. ..... gr. xvi | 1 06
Sodii bicarb ..... gr. viii | 50

M. Ft. chart No. iv. Sig.: One powder to be given in a teaspoonful of arrowroot water every three or four hours, until relieved.

In infants under three months of age one-half of a powder (equal to 1/40 gr. of opium) may be given. Opium preparations may be given by rectum safely to relieve the pain and diarrhea in the following form:

℞. Pulv. opii et ipecac. ..... gr. iv | 25
Acidi tannici ..... gr. xii | 75
Mucilag. acaciæ ..... ʒii | 60

M. Sig.: One tablespoonful added to an ounce of starch water and given as an enema.

In this way only a small amount of opium is given and it is absorbed very slowly, making it a comparatively safe method of administering opium to infants.

Bismuth is one of the reliable preparations with which to combat diarrhea. It may be given in one of the following combinations:

℞. Bismuthi subnit. ..... ʒss | 2
Cretæ preparatæ ..... gr. xviii | 1 20
Sodii bicarb ..... gr. xii | 75
Pulv. tragacanthæ co. ..... gr. xx | 1 30

M. Ft. chart No. vi. Sig.: One powder in a dessertspoonful of arrowroot water every three to four hours. Half this amount may be given to very young children.

For adults the following is of use:

℞. Bismuthi carb. ..... gr. lxxx | 5 30
Pulv. cretæ arom. ..... ʒiiss | 10
Sodii bicarb ..... gr. xl | 2 60
Spiritus ammon arom. ..... ʒiv | 15
Mucilag. tragacanthæ
Aquæ chloroformi, ää ..... ʒii | 60
Aquæ cinnamomi, q. s. ad ..... ʒviii | 240

M. Sig.: Two tablespoonfuls every two or three hours.

In the treatment of the acute diarrheas Stevens states that if much pain be present either Dover's powder or paregoric are of value, but in most cases he recommends mild astringents such as bismuth and chalk. They may be combined with advantage with an intestinal antiseptic as follows:

℞. Bismuthi subnitratis ..... ʒiii | 12
Bismuthi subsalicylatis ..... ʒi | 4

M. Ft. chart. No. xii. Sig.: One powder every two to three hours.

Or,

℞. Salol ..... ʒss | 2
Bismuthi subnitratis
Cretæ preparatæ, ää ..... ʒii | 8
Pulv. acaciæ, q. s.
Aquæ cinnamomi, q. s. ad ..... ʒiii | 90

M. Sig.: Shake bottle and take one dessertspoonful every two to three hours.

He advises that opium preparations when they are indicated, be given alone and not in combination with other preparations in order that they may be discontinued more readily when no longer required. When the colon is especially involved copious injections of warm water are recommended both to cleanse the bowel and to exert a soothing effect on the irritated mucous membrane. The following formula is advised for this purpose:

℞. Tinct. opii ..... m. v-x | 30-65
Aquæ amyli ..... ʒi-ii | 30-60

M. Sig.: To be introduced into the bowel by high injection.

Intestinal antiseptics such as salol and bismuth salicylate should be given at the same time by the mouth.

The following combination is recommended by Stevens:

℞. Bismuthi subnitratis ..... ʒii-iv | 8-15
Salol ..... gr. xxiv | 1 60
Misturæ cretæ ..... ʒiii | 90

M. Sig.: One teaspoonful every two hours.

Chronic Metritis.

In the treatment of chronic metritis A. Robin in *Jour. de Med. de Paris*, recommends a hot douche on rising in the morning and on retiring at night. The temperature of the water should be gradually increased with the ability of the patient to stand it. Added to the water he recommends potassium permanganate, corrosive sublimate, or tannin as the individual case may require. During the douche the patient should lie down on her back with the hips elevated, and she should be instructed to remain in that position for ten minutes following the douche.

Robin also recommends rectal irrigations with hot water and warm alkaline baths.

Any deviation or flexions of the uterus should be corrected, and in some cases massage of the uterus is advised.

Locally, in addition to the hot douches, he applies tampons soaked in glycerite of tannic acid or vaginal suppositories of tannin and ichthyol. When ulcerations are present around the os they should be touched with applications of the tincture of iodin.

Successful Treatment of Ozena with Paraffin Injections.

An interesting feature of the last few months has been the testimony accumulating abroad in regard to the favorable results of treatment of ozena with paraffin prothesis. It is not settled whether hard or soft paraffin is better. Brindel and Moure of Bordeaux claim the priority, and Brindel reports 150 patients treated with soft paraffin with most excellent results. His trials of hard paraffin, that is, not melting under 45 or 50 C. were by no means so good. In some instances the paraffin gangrened out, even when very small amounts had been injected. Brockaert of Ghent ascribes ozena to the action of certain micro-organisms which generate a toxin that irritates the vessels, inducing obliterating endarteritis and endophlebitis with diffuse sclerosis of the mucosa, especially of the hypophysis. He prefers paraffin not melting under 50 C., and has had 25 patients completely cured out of 30 thus treated, with 7 much improved, but no benefit in 10 cases. Guiser thinks that the best results can be obtained with the use of paraffin softened, not by heat, but by pressure, using a special syringe, compressing the paraffin till it issues from the tip in a soft stream. He has thus cured 15 out of 22 patients. He never injects more than 1 c.c. at one point, repeating the injection every five or six days. It is impossible to hope for success, he says, if the atrophy of the mucosa has proceeded beyond a certain point.

Medicolegal

When Information from Observation Becomes Privileged.

The Supreme Court of Missouri, Division No. 2, says that in the personal injury case of Smoot vs. Kansas City, the question was asked a physician as to whether or not he saw the plaintiff spitting any blood, while on the sidewalk or in the street, before getting into the ambulance. The answer was excluded. The witness was assistant police surgeon of the city, but stated that he was not on the city pay-roll, but handled rich and poor alike, that is, those who could pay him, paid him, and those that could not pay him he gave attention just the same. The court says that in order to render observations and opinions acquired by a physician privileged it must appear that the relation of physician and patient must first be established. After a patient has submitted himself to an examination by the physician then information acquired by observation would be excluded on the same ground as a direct communication by the patient to the physician. So far as the question propounded in this case was concerned, it did not appear as to whether or not the information desired from the physician as to the spitting of blood was from observation prior to any sort of examination of the plaintiff. It was clear that when the physician first appeared on the scene of the accident if he observed the plaintiff and that he was not at that time spitting blood,

there was no reason why such testimony should be excluded, for that was prior to any submission by the patient to the examination of the physician. If on the retrial of the cause it appeared that the relation of physician and patient had been established and that the plaintiff had submitted himself for examination by the physician, then any information acquired by observation after that time would be incompetent. But, on the other hand, if prior to the establishment of this relationship, the physician observed the patient and acquired information from such observation, the court knows of no rule of evidence that would make such information privileged.

Employment by Conductor of Physicians for Trespasser.

The Court of Civil Appeals of Texas says that the case of Wills and others vs. International and Great Northern Railroad Company was brought to recover for professional services rendered by the plaintiffs as physicians and surgeons on alleged employment by the conductor of a freight train which had run over the patient, through his fault alone, while he was a trespasser on the company's right of way. The trial court concluded as a matter of law: 1. That the burden of proof was on the plaintiffs to show authority on the part of the conductor to employ them. 2. That the said conductor was acting beyond the scope of his authority as agent of the company in employing the plaintiffs; and that there was no sufficient reason why the company should not be permitted to deny the conductor's authority to make such employment; and that therefore the company was in no way liable to the plaintiffs. The Court of Civil Appeals is of the opinion that these conclusions of law were correct, as based on the facts, and that the proper result was reached in the disposition of the case by a judgment in favor of the company. It says that under the particular facts of this case, the conductor had no authority to bind the railway company to a contract to pay for the services rendered by the plaintiffs. The facts in the record did not raise the issue of estoppel and ratification. This court does not undertake to say what would be the power of a conductor of the railway company where a passenger or employé was injured. Here the party injured was a trespasser. The condition that called for treatment was attributable to his own negligence; and the court cannot see how the railway company could be held liable for the medical expenses incurred in treating such a person, unless it had obligated itself through some authorized agent to incur such liability. The court can find nothing in the power usually delegated to a conductor, or in the duties that he is required to perform, that implies the authority to make contracts binding his principal, whereby it should be burdened with the cost and expense of the treatment of injured persons, for whose condition it could in no wise be held responsible.

Validity and Force of Rules of State Board of Health.

The Supreme Court of Iowa holds, in the case of Pierce vs. Doolittle, that Section 2573 of the Iowa Code is not unconstitutional in providing that any one who knowingly fails, neglects or refuses to comply with and obey any order, rule or regulation of the State Board of Health is guilty of a misdemeanor. It says that it was contended in this case that the crimes which are punishable under the statutes of the state must be prescribed by statute and that they cannot be left for determination to boards or tribunals whose rules and regulations are not prescribed by the legislature itself. In support of this contention cases were cited in which it has been held that the power of the legislature to enact and repeal laws cannot be delegated. But the court does not see the applicability of that well-recognized principle to this case. It says that the offense defined by Section 2573 of the Code, the punishment of which is provided for in Section 4906 of the Code, is not made to depend in any way on any other legislative authority than that on which the Code itself is founded. The act to be punished is the violation of the rules of the State Board of Health, a tribunal constituted by law and having authority conferred on it by law, and no other authority. The court thinks it clear that the legislature may provide for the punishment of acts in resistance to, or violation of, the authority conferred on such subordinate tribunal or board. "When these boards duly adopt rules or by-laws by virtue of legislative authority, such rules and by-laws, within the respective jurisdictions, have the force and effect of a law of the legislature; and like an ordinance or by-law of a municipal corporation, they may be said to be in force by authority of the state."—Blue vs. Beach, 155 Ind., 121. Every person affected by the rules and regulations of such a board or tribunal is required to govern himself in accordance with such rules and regulations if within the scope of the authority granted by the legislature, and adopted and published as required by law. Furthermore, the court holds that it was competent to show by the secretary of the State Board of Health what the rule in question, as to reporting the existence of scarlet fever, was; and that, if it was further shown that the accused had notice and knowledge of such rule, then the violation by him would constitute a crime. A certified copy of the publication containing the rules of the State Board of Health was properly admitted in evidence.

Divorce for Opium "Drunkenness" from Medicine.

The Supreme Judicial Court of Massachusetts says, in the divorce case of Gowey vs. Gowey, where it overrules exceptions to a decree, that it is not easy to define the word "drunkenness" as applied to the use of opium, morphin, or other drugs. But the evil effects resulting from the continued use of opium or morphin are well known. They interfere as much, to say the least, with the happiness of married life, and produce other effects on the marriage relation as deplorable as those resulting from the excessive use of intoxicating liquors. And it was the state thus resulting from their excessive use which the legislature intended, the court thinks, to describe by the word "drunkenness" as applied to the use of opium, morphin and other drugs, and from which it is intended to afford relief to the innocent party. In order to warrant a decree, the evidence must be such as to justify a finding that the habit was gross and confirmed, and existed when the libel was filed. But if a gross and confirmed habit is once shown to exist, the reasonable probability that it will continue to exist, furnishes some ground for an inference which the court may consider in dealing with a litigated matter. In this case there was evidence warranting a finding that the libelee (defendant) had become addicted to the excessive use of opium, and that the habit had become gross and confirmed. She took for many years a medicine called "Tincture of Sudorific," which, there was evidence tending to show, she admitted contained opium. At first the libelant (husband), who did not know what it was, bought it for her in half pints and pints, and later in pints and quarts. There was evidence tending to show that she had the appearance of one addicted to the excessive and continued use of opium, and that her conduct was, at times, such as might fairly be attributed to the excessive use of that drug. Nor does the court think that there could be said to have been a connivance on the part of the husband, he having testified that, though he knew that his wife had been taking the medicine for a long time, he did not know until a physician was called to attend her in an attack of illness that the medicine contained opium, when he was told that she must have it, but to wean her from it, and other evidence showed that he did, and offered to do, all that could be reasonably required to assist her in overcoming the habit.

Current Medical Literature

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

Medical Record, New York.
July 14.

1 *New Method of Incision for Removal of the Breast. C. Beck, New York.
2 *Contagiousness of Gumma. C. M. Williams, New York.
3 *Carbon Dioxid Gas Retention as a Frequent Factor of Disease. L. B. Couch, Nyack, N. Y.
4 Address of the President of the Twenty-eighth Meeting of the American Laryngological Association at Niagara Falls. J. W. Gleitsmann, New York.
5 Case of Papilloma of the Larynx in a Child. F. R. McCreery, New York.

1. **Incision for Removal of the Breast.**—Beck describes his method as follows: The incision line around the breast is in the form of a rectangle. The interior line of this rectangle is continued on both ends to the extent of about three inches. The same is done with the lower end of the external side, while the upper exterior end is extended along the outer margin of the pectoralis major up to its humeral insertion. The axilla itself is not touched, in order to avoid cicatrization in the axilla, which is apt to produce edema of the arm. After the rectangle is excised the upper skin flap is formed and reflected. This fully exposes the area of the operation. Whether the operation be radical or not, the principle of access remains the same.

2. **Contagiousness of Gumma.**—Williams says that if the spirochete is the specific organism of syphilis it must exist in gummata, though in such small numbers that up to the present it has escaped detection. The cases in which exposure to tertiary lesions have been followed by contagion are not sufficiently numerous and carefully reported to bring conviction to even a conservative mind. The experiments which have been conducted in relation to this problem are conclusive and prove that a gumma may be capable of transmitting the disease. This does not mean that a gumma is always contagious. Williams thinks that it is probable that the living growing border is always infectious. He explains the rarity of examples of infection by the fact that the organism is present in such scanty numbers and has so little chance to reach fertile soil. But this belief is not proven. Whatever may be the explanation of the various questions relating to the contagiousness of gumma, however, the practical lesson is the same. So long as a man shows any sign of syphilis, so long must he be considered a source of danger to the community.

3. **Carbon Dioxid Factor in Etiology.**—Couch believes that all varieties of rheumatism are caused by a carbon dioxid or a carbonic acid toxemia, due largely to fermentation of starchy substances in the stomach and bowels. This fermentation is the result of improper salivation and mastication, aided by the pernicious use of liquids during and after meals. These liquids dilute and weaken the ferments which properly digest such food. Couch goes on to explain his belief that many of the diseases common to man are due primarily to retention of carbon dioxid in the system, through failure of the excretory organs properly to eliminate it. From this point of view he discusses gastric and enteric cartarrh, intestinal ulcers, pneumonia, shock, heart failure, angina pectoris, rheumatism, nephritis, scarlet fever, cataracts and albuminuria. He emphasizes the necessity of eliminating from the body this poisonous excretory gas.

New York Medical Journal.

July 14.

6 *Therapeutic Value of Ergot. O. T. Osborne, New Haven, Conn.
7 Principles of Treatment in Diseases of Children. J. M. Taylor, Philadelphia.
8 Differential Diagnosis and Clinical Significance of Peritonitis. G. P. LaRoque, Richmond, Va.
9 *A New Form of Intestinal Obstruction. The Methods for Preventing a Recurrence of Volvulus of Sigmoid Flexure. A. V. Moschcowitz, New York.
10 *Death from Suppurating Tonsil. V. Kenerson, Buffalo, N. Y.
11 Deformities of the Trunk in Children. L. C. Ager, Brooklyn.
12 *Inguinal Hernia. J. M. White, Meridian, Miss.
13 Hernia of the Bladder. C. F. Kivlin, Troy, N. Y.

6. **Therapeutic Value of Ergot.**—Osborne, in discussing the therapeutic value of ergot, lays down the indications for its use as follows: 1. To contract the blood vessels, to raise the blood pressure and to stimulate the heart in conditions of shock, collapse and circulatory depression. 2. To contract the blood vessels of the brain and spinal cord, especially of the meninges, when they are acutely inflamed, irritated or congested. 3. To quiet the nerve pains in inflammation and irritation of nerves, and especially if the origin of such irritation is central. 4. To promote activity of the bowels when there is intestinal muscular debility, paresis or paralysis, as in tympanites after operations, or when there is obstinate constipation. 5. To contract the uterus in uterine hemorrhage. 6. To ameliorate asthma which is due to nervous irritability or reflexes. 7. To modify or to diminish excessive secretion of the thyroid, as occurs in some forms of hysteria and in exophthalmic goiter. 8. To quiet the nervous system and to aid in overcoming the morphin, opium, alcohol or other drug habits, and to increase the potency of any dose of morphin that may be required for nerve pain.

He has also found ergot useful in one other condition, a most inveterate diabetes insipidus occurring in a boy 10 years old. Osborne gave ergot, one-half teaspoonful of the best fluid-extract, four or five times a day at first and later the same size dose only twice a day. The result has been a remarkable one. All the constitutional symptoms have disappeared. The quantity of urine was reduced from twelve to about five quarts a day. In fact, the ergot has done the boy nothing but good, although he has taken it continuously for a year and a half. He does not show any symptoms of ergotism.

9. **Treatment of Volvulus of Sigmoid.**—Moschcowitz has operated in five cases of volvulus of the sigmoid flexure, doing a sigmoidopexy in each instance with most satisfactory results except in one case, in which an internal strangulation occurred following the operation.

10. **Death from Suppurating Tonsil.**—A case of suppurating tonsil with sepsis and edema of the glottis causing strangulation is reported by Kenerson. The patient, a woman, aged 33, within two days developed an enormous abscess of the tonsil, which opened as soon as touched with the finger, although every precaution was taken in the way of antisepsis, the abscess refilled and strangulation became imminent. Artificial respiration became necessary, and finally, the relief proving only temporary, a tracheotomy was performed. The edema spread rapidly all over both sides of the neck and well down to the clavicle; the discharge came almost constantly from the nose and in large quantities. Death ensued on the fourth day.

12. **Inguinal Hernia.**—White questions the possibility of union occurring between two muscles or the edges of muscular tissue unless the edges are freshened. In operations for the cure of hernia this is important, because otherwise there will be left a weak spot in the abdominal wall, which, White thinks, may account for some of the failures in Bassini's operation. To obviate this he suggests cutting out an inverted V-shaped piece of tissue in the external oblique muscle, which makes this muscle reinforce the weak place in the abdominal wall at the internal oblique and Poupart's ligament. He presents a variety of different plans that can be used to close the hernial openings with muscular tissue. In cases in which the muscular walls have been stretched and are very lax he suggests raising the edge of the internal oblique and exposing the outer edge of the transversalis. An inverted V-shaped piece of this muscle is excised, making a round opening for the cord to pass through; a piece is also cut out of the transversalis. The cut edges are united with sterile catgut. This will make tense the lower edge of the transversalis muscle, drawing it down and closing the opening of the internal wound with muscular tissue. The lower edge of the internal oblique is replaced and the cord raised; the sutures are then inserted into the internal oblique and Poupart's ligament, as in Bassini's operation, thus making a combined operation.

Boston Medical and Surgical Journal.

July 13.

14 Therapeutic Effect of Sound Waves, or Mechano-Therapeutics of the Ear. C. J. Blake, Boston.
15 *Method for the Differential Staining of Blood Plates. J. H. Wright, Boston.
16 *Occurrence of Occult Hemorrhages in Typhoid Fever. W. Tileston, Boston.
17 Sore Throat, Etiology and Therapeusis. E. D. Spear, Boston.

St. Louis Medical Review.

July 7.

18 Further Series of Enucleations of the Prostate. W. Thomson, Dublin.
19 Cold Air in the Treatment of Tetanus and Yellow Fever. W. W. Crane, Sinclair, Ill.

Lancet Clinic, Cincinnati, Ohio.

July 14.

20 The Forceps and its Alternatives when the Head is Arrested in the Pelvic Brim. W. Gilleaple, Cincinnati.
21 Expert Medical Testimony. A. N. Ellis, Maysville, Ky.

15. **Differentiating Staining of Blood Plates.**—Because the blood plates stained by his method exhibit peculiarities of staining and structure which permit them to be definitely recognized, Wright has been able to show that the so-called granular material seen in sections of mixed thrombi consist exclusively of blood plates. Perfectly fresh tissue (the spleen of a young kitten is most suited for this purpose) is fixed in methyl alcohol, dehydrated by acetone, cleared in xylol and embedded in paraffin. The sections, two microns in thickness, are stained while fixed to a cover glass. A sufficient quantity of the stained fluid is placed on the cover glass to cover it, and then an equal quantity of water is added to the staining fluid drop by drop. The mixture remains on the preparation ten minutes. The cover glass is then rinsed in water, emmersed in a 1 to 5,000 aqueous solution of sodium hydrate for five seconds, washed in water, dehydrated with acetone, cleared with oil of turpentine and mounted in turpentine colophonium.

16. **Occult Hemorrhages in Typhoid.**—Tileston examined the stools in 68 cases of typhoid by means of guaiac and aloin tests, following practically the method of Boas. Eighteen cases out of the 68 gave positive tests at some time during the course of the disease. One of these was complicated with enteritis, to which the presence of blood was probably due; there remain 17, or 25 per cent., which showed the presence of occult blood. In all, 422 stools were examined, of which 42 were positive, i. e., 10 per cent. A division into groups, according to the severity of the disease, gave the following results: Fifteen mild cases, 3 positive, 20 per cent.; 39 moderately severe, 10 positive, 26 per cent.; 14 severe or fatal, 5 positive, 36 per cent. A study of the positive cases brought out the following facts: The temperature on the day of positive reactions was considerably elevated in most cases; in 5, however, it had nearly or quite reached normal. Diarrhea was present in 11, absent in 6 cases. The number of positive results was not large, averaging 2.4 per case.

The relation to gross hemorrhages is interesting but disappointing. Hemorrhages occurred in 7 cases (10 per cent.); in 6 of these, although stools were examined in all within the preceding twenty-four hours, the tests were negative. In one case only were positive results obtained before the bleeding became manifest. The prognosis was certainly not unfavorably affected by the occurrence of occult hemorrhages, for the mortality of the positive cases was 5.5 per cent, while that of the whole series was 7 per cent. Of the 6 patients in whom gross hemorrhages occurred without premonitory positive tests 4 died.

American Journal of Medical Sciences, Philadelphia.
July.

22 *Further Observations on the Anatomy of the Duodenum. A. J. Ochsner, Chicago.
23 *Sufficiency of Simple Intercostal Incision in Acute Empyema. J. F. Leys, U. S. N.
24 *Traumatic Intraperitoneal Rupture of the Bladder. A. P. C. Ashhurst, Philadelphia.
25 Experiments on the Great Omentum. L. S. Dudgeon and A. Ross, London.
26 Sauerbruch's Operative Chamber: History, Experiments, and Experiences. B. Hahn, Tacoma, Washington.
27 Surgical Treatment of Hepatic Cirrhosis, with Special Reference to Biliary Drainage. C. G. Cumston, Boston.
28 *Case of Partial Dislocation of the Fifth Lumbar Vertebra on the Sacrum. H. O. Feiss, Cleveland, O.
29 *Practical Significance of a Trace of Albumin in the Urine. J. P. Tunis, Philadelphia.
30 Alcoholic Multiple Neuritis. C. W. Burr, Philadelphia.
31 Acute Paranoia Exhibiting Cyclical Relapses. T. J. Orbison, Philadelphia.
32 *The Breus Hematom-mole. A. H. Bill, Cleveland.
33 *Method for the Isolation of Typhoid and Colon Bacilli from Drinking Waters, etc. T. A. Starkey, Montreal, Canada.
34 Epithelial Lined Fistula-in-Ano in an Infant. M. W. Ware, New York.
35 *Advisability of Eliminating the Terms Meniere's Disease and Meniere's Symptoms from Otologic Nomenclature. E. Amberg, Detroit.

22. **Anatomy of Duodenum.**—Ochsner reports the histories of 16 patients operated on in the course of one year in whom there was dilatation of the upper portion of the duodenum.

23. **Intercostal Incision in Acute Empyema.**—Leys points out that the majority of cases of empyema are acute in their origin and course, the condition being a sequel of an acute infectious disease. The best treatment for such cases, as soon as the diagnosis of empyema has been made on the signs and symptoms and confirmed with the exploring needle, is simple incision through an intercostal space. Resection of a rib is not only quite unnecessary, he states, but positively undesirable in practically all acute empyemas. Leys reports 5 cases of acute empyema occurring in boys between 16 and 17 years of age. In 4 of them the empyema was an immediate sequel of lobar pneumonia. A rapid and complete recovery ensued in each of these cases. In the other case the empyema was developed from a sero-fibrinous pleurisy. Recovery proceeded more slowly in this case.

24. **Traumatic Intraperitoneal Rupture of Bladder.**—Ashhurst reports two cases of this kind and analyzes 110 cases found in the literature that had been treated by laparotomy.

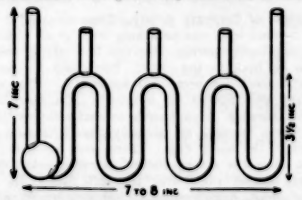
28. **Partial Dislocation of Lumbar Vertebra.**—Feiss reports the case of a man, aged 20, who was injured in the right side by a trunk falling on him. After the injury he had severe pain and limped, and there was ecchymosis of the right buttock. He limbered up and later got stiff again. Soon he had to go to bed on account of pain. His legs became swollen and drawn up, the swelling occurring at the ankles, calves and knees; the calves became hard. He was troubled chiefly on account of pain and stiffness in his back and severe pain in the ankles and calves. This pain was worse at night. He was also troubled with numb feelings and paresthesia. He believed his legs were growing thinner. There were no bladder or bowel symptoms. There was some cough. His gait resembled that of a tabetic, although it was not characteristically so. He threw his legs forward rather forcibly, but landed on the ground gently with his feet. Chest and abdomen were negative. Arms, hands and shoulders were negative. The examination of the spine showed that motions were quite free, except for a slight rigidity in the lowest lumbar region. The hip joints were limited in abduction. The knees showed nothing except a sharp click of the left one on flexion. The feet were in a position of marked valgus, with redness and swelling under the inner ankles, but motions were quite free and there was no spasm—they were cold, clammy and bluish. There was no evidence of motor paralysis. The sensation to touch was normal. Hot and cold sense seemed uninjured. Knee jerks were present and normal; there was neither clonus nor Babinski sign. Measured from the umbilicus to the internal malleolus, the right leg was three-fourths of an inch shorter than the left. Both thighs and calves were thin and atrophic and the perineum was slightly broadened. The spinous processes showed a long left dorsal curve and a slight right lumbar curve. A Roentgen picture of the lumbar region showed an apparent displacement of the fifth lumbar vertebra, three-sixteenths of an inch to the right of the middle line, and a compression of the left side of the body of the same vertebra. A plaster spica was applied from the costal border, including the right hip, so as to immobilize the lowest region of the spine. This case shows, first, at least a partial dislocation of a lumbar vertebra may exist without complication of fracture; second, it may persist unreduced and yet with improvement in the symptoms; third, that the physical signs may not be sufficient for diagnosis, and that a Roentgen picture is necessary for proof; fourth, there is very likely play in the articular facets, else there would be fracture; fifth, the chief sign of dislocation low down may be the change in the gait; sixth, fixation is probably indicated in old unreduced cases.

29. **Significance of Trace of Albumin in Urine.**—Tunis summarizes his paper as follows: From any point of view the term physiologic albuminuria is almost universally regarded as misleading, unsatisfactory and inadequate. So long as albumin is a constituent of the urine the individual voiding it can not be regarded as normal. The mortality among such persons must necessarily be higher than among an equal number of individuals who do not show this phenomenon. The actual mortality rate among this class can best be approximated by a comparison of the records of half a dozen of the largest life insurance companies (dealing with hundreds of thousands of cases) over a period of twenty years at the least. The prompt means of discriminating between the transient forms

of albuminuria and those of real clinical significance may be found in some such therapeutic test as that of calcium lactate rather than by any further developments in the chemistry of the urine. Experience proves that a faint trace of albumin in the urine of an individual past middle life is often of greater significance than a decided trace by unexpectedly directing attention to the finding of casts of pathologic importance, which might otherwise have been easily overlooked. For practical purposes the heat and nitric acid test for albumin is the best one, and the careful use of Roberts' solution is the most satisfactory control test in doubtful cases. For the proper diagnosis and prognosis too much stress can not be laid on a thorough consideration of the clinical conditions as a whole.

32. **Hematom-Mole.**—Bill reports a case of this kind in a very early stage of its development, which seems to show some of the essential characteristics more clearly than the more advanced cases, in which the early features of the formation are overshadowed or lost sight of entirely in the completely developed mole. A summary of the clinical and pathologic characteristics which will serve in the diagnosis is as follows: 1. The marked disproportion between the size of the embryo and the period of gestation. 2. The relative absence of symptoms of intoxication from the long retention. 3. The disproportion between the size of the embryo and that of the ovum. 4. The presence of the tuberous hematomata, which may be lobulated and have constricted bases. 5. The lack of blood vessels in the chorionic villi. 6. The poor development of the epithelium of the chorionic villi, which may be entirely absent, the layer of Langhan's cells being particularly poorly formed. 7. The persistence of the trophoblasts. 8. The poor development of the embryo, which may not be found at all, having been absorbed. It usually corresponds in size to that of from four to six weeks' development.

33. **Isolation of Typhoid and Colon Bacilli.**—The method put forward by Starkey is based on three facts appertaining to the colon and typhoid bacilli: First, their motility; second, their power to grow in some medium which possesses a restraining action on many other bacteria; third, their ability to grow anaërobically. Expressed briefly, the rationale of the work is as follows: 1. The motility will separate the colon and typhoid bacilli from non-motile organisms and from those less motile than themselves. 2. The restraining medium prevents the ready growth of most organisms except colon and typhoid bacilli. 3. The anaërobic conditions prevent the development of aërobic organisms which form the majority of bacteria with which one comes into contact in ordinary bacteriologic examinations. These three factors, when acting together, at the same time practically insure colon and typhoid



bacilli having the same ascendency. The following are the details of the method of applying the principles: A piece of glass tubing one-quarter, or, better, three-eighths of an inch in diameter is bent in the manner shown in the accompanying illustration. A bulb is blown near the lower part of the first limb (bulb about 8 or 10 c.c. capacity), and observation openings are made in the uppermost parts of the bent portions. This apparatus is filled with ordinary nutrient broth (liter+1 per cent., normal acid), to which 0.05 per cent. pure carbolic acid has been added. The openings are plugged with wool and the whole sterilized in Koch's sterilizer for one hour. Inoculations are made at the bulbous end. The tube is then placed beneath a bell jar, in which perfect anaërobic conditions can be secured. This latter point is extremely important, because if not carefully carried out it will lead to endless failures. The whole apparatus is then placed in the incubator at 37.5 C. At the end of twenty-four, thirty-six or forty-eight hours samples are taken (about 1 c.c. in quantity) from the observation tubes in order, starting from the one next the bulbous end, and then spread out on Conradi-Drigalski medium. These plates are then incubated at 37.5 C., and during the next twenty-four hours colon and typhoid bacilli will be revealed if present in the original inoculations.

35. **Meniere's Disease and Meniere's Symptoms.**—After discussing the advisability of eliminating these terms from otologic nomenclature, Amberg concludes as follows: 1. The triad, hardness of hearing, vertigo and tinnitus, is given as constituting the functional disturbance observed in the so-called Meniere's disease. 2. These symptoms occur also in numerous affections which are not based on the pathologic findings as described by Meniere in his historical case. 3. The observation that not always a typical picture is present has led to the introduction of other terms, such as Meniere's symptoms, etc., which has proved to be confusing. 4. Even affections of the middle ear, of the outer ear or of other parts of the body can cause the symptoms described by Meniere. 5. These latter causes can be diagnosed in many instances and prove the existence of a great group of affections characterized by functional disturbances of the inner ear. 6. By abandoning the terms Meniere's disease and Meniere's symptoms a more definite nomenclature can be introduced. This is important, not only from a physiologic and pathologic but also from a clinical standpoint. By using, for instance, the terms internal syphilitic otitis, or leukemic, or angioneurotic, or gastric, a clearer conception of some affections would ensue. 7. The various terms should be agreed on. The many international medical meetings give ample opportunity for such a procedure.

Buffalo Medical Journal.

July.

36 Migraine. C. King, Machias, N. Y.
37 *The Lower Extremity of the Ulna as a Factor in Colles' Fracture. D. M. Totman, Syracuse, N. Y.
38 Obstetric Amenities. S. Y. Howell, Buffalo, N. Y.
39 Condition of Sleeplessness and its Treatment. W. H. Birchmore, Brooklyn.
41 Interstate Reciprocity in Licensing. W. W. Potter, Buffalo, N. Y.

37. **The Ulnar in Colles' Fracture.**—Totman contends that cases are occasionally met in which the injuries of the lower end of the ulna are such that bony formations will occur from the injury to the periosteum and the other adjacent structures. In certain cases deformity will result in spite of the very best care. He agrees with Moore that the care of the lower end of the ulna is the key to the successful treatment of Colles' fracture. If the luxation is reduced successfully, and if the ulna is held up in its proper normal place, it makes the best possible splint for the fractured radius. This can best be accomplished by the use of a small roller under the outer and anterior surface, which is held in place with a firm encircling adhesive plaster.

Journal of Cutaneous Diseases, New York.

July.

42 *Two Cases of Paget's Disease Treated by the X-ray, with Report of the Microscopic Findings in one of Them After Prolonged Treatment. M. B. Hartzell, Philadelphia.
43 Case of Pityriasis Rubra of Hebra's Type. F. H. Montgomery, Chicago.
44 Pemphigus Vegetans. A. Ravogli, Cincinnati.
45 Intramuscular Injections in the Treatment of Syphilis and the Use of the Sozoiodolate of Mercury. A. Garceau, San Francisco.

42. **Roentgen Ray in Paget's Disease.**—The first case reported by Hartzell occurred in a woman, 53 years old, the disease having been of thirteen months' duration. After employing the usual remedies for some months without producing more than a slight temporary improvement, the *x*-ray was resorted to. Exposures were made daily at first, each treatment lasting 10 minutes, with the anode first at 10, and later at 8 inches from the patch. After the thirteenth sitting the improvement was quite evident, and after the nineteenth exposure, made five weeks from the beginning of the treatment, the diseased area was completely healed. Several slight recurrences yielded promptly to the ray. Finally, an induration of the gland, with increasing impaction of the nipple, made a

removal of the breast necessary. The second case occurred in a woman 60 years old and is almost the exact counterpart of the first case, both in its clinical features and as to the treatment and its results.

American Journal of Urology, New York.
July.

46 *Renal Decapsulation and Nephrotomy in the Treatment of the Serious Forms of Eclampsia. Pousson and Chambrelent, Bordeaux, France.
47 Surgical Aspects of Anuria. C. G. Cumston, Boston.

46. **Renal Decapsulation and Nephrotomy in Eclampsia.**—Pousson and Chambrelent point out that the methods usually employed for treating eclampsia do directly with the toxemia but neglect the renal and hepatic lesion, which are only indirectly influenced by these methods. In order to remedy bad effects resulting from the treatment by lavage of the blood, and in order to render blood letting more efficacious, and to do away with the renal lesions, they have decided to interfere surgically with the kidneys in cases of eclampsia, although they do not teach the substitution of operative for medical treatment. They believe that in instances of serious intoxication which has existed all the medical means, particularly in cases accompanied by oliguria, with a decrease of urea and other extractive matters of the urine, along with a large quantity of albumin, surgical interference is justified and is even absolutely necessary when a histologic examination of the urinary deposit shows the presence of the characteristic figured elements of acute nephritis. They performed renal decapsulation in one instance 36 hours after the labor had terminated. The patient recovered.

Albany Medical Annals.
July.

48 Sanitary Department of Armies and the Military Medical Officer. (To be continued). J. V. Hoff, U. S. A.
49 *Intermittent Claudication, due to Angiosclerosis of the Extremities. R. H. Irish, Troy, N. Y.
50 Osteomyelitis of the Femur. G. G. Lempe, Albany, N. Y.

49. **Intermittent Claudication.**—Irish examined the foot pulse in both feet in 80 cases, 40 males and 40 females. Twenty of them were [illegible] of arteriosclerosis, the other 60 included a variety of other medical and surgical cases. In the 60 cases he obtained a positive result in all. In the 20 cases, pulsation was absent in one or both of these arteries in 10 instances. In 4 cases there was absence of pulsation in one posterior tibia. In 8 cases the pulsation in the dorsalis pedis of one or both sides was absent. Irish believes that in cases exclusively of arteriosclerosis the foot pulses may be regarded as fixed and constant, but that absence of pulsation in one or both of these arteries in cases of general arteriosclerosis is not such an infrequent symptom as the reports of some observers that indicate it. He reports one case, that of a man, aged 89, in which the etiologic factor was undoubtedly the advanced age of the patient. The diagnosis was based on the intermittent character of the symptoms, the changes and absence of pulsation observed in the foot arteries with coldness, numbness and other evidence of local circulating disturbances. The condition has improved under treatment which consisted of hot salt-water foot baths and 15 grain doses of potassium iodid three times daily.

American Medicine, Philadelphia.
June.

51 *Syphilis of the Stomach. W. G. Morgan, Washington, D. C.
52 Diagnosis of Incipient Pulmonary Tuberculosis. G. W. Norris, Philadelphia.
53 Pulmonary Tuberculosis in its Relation to Obstetrics. F. H. Washburn, Jefferson, Mass.
54 Metabolism of Water. H. Richardson, Baltimore.
55 Recent Studies in Measles. R. C. Rosenberger, Philadelphia.
56 Lesions of the Neurofibrils in Pathologic States. G. E. Price, Philadelphia.
57 *Foreign Body in the Crystalline Lens, Extracted by the Electric Magnet. H. F. Hansell, Philadelphia.
58 Static Electricity in General Practice. W. P. Glendon, Cedarville, N. J.
59 State Care of the Insane in New York. F. Peterson, New York.

51. **Syphilis of Stomach.**—Morgan reports one case of gastric syphilis, of the pseudocancerous type, in which the diagnosis rested on the therapeutic result. The gastric symptoms had been present for four years. A specific history was denied. A tumor could not be palpated. A little later a movable tumor was palpated occupying the pyloric region. This, together, with a dilatation of the stomach seem to warrant a diagnosis of carcinoma of the pylorus. A history of syphilis was then admitted and Morgan prescribed a saturated solution of potassium iodid in increasing doses, on a supposition that the tumor in the stomach was a gumma. The treatment was continued for some months, the patient eventually regaining perfect health.

57. **Foreign Body in Crystalline Lens.**—Hansell reports the case of a woman of 35 who, while attempting to loosen the lid of a box by pounding the head of a hatchet with a hammer received an injury to the left eye. Within 24 hours of the time of the accident a delicate linear scar was visible at the junction of the upper and middle thirds of the cornea opposite the upper pupillary margin, a punctured iris and a swollen and partially opaque lens. A skiagraph located the steel partly in the lens and partly in the vitreous lying horizontally and about 4 mm. in length. The eye was moderately congested, sensitive to light, and vision was reduced to the perception of large moving objects. Under antiseptic precautions and cocain anesthesia removal was safely accomplished. The operation was divided into two stages. First, the magnet was cautiously approached toward the cornea in the line with the presumed passage of the body, until it was three-fourths of an inch distant, when the steel fragment was raised from its bed in the lens and drawn, accompanied by lens matter, into the anterior chamber. The current was cut off and the steel dropped into the bottom of the chamber. Second, the cornea was opened in as near as possible the line of the scar, the blunt tip of the magnet applied to the opening, the current turned on and the steel extracted. The greater part of the cataractous lens was expressed through the corneal cut without loss of vitreous and the eye was bandaged. Two days later, the patient was allowed to go to her home. According to the last report of her attending physician she had a low grade of iritis, probably induced by the traumatism and by the retention in the anterior chamber of a small mass of lens matter.

The Medical Fortnightly, St. Louis.
June 25.

60 Sudden Abdominal Pain—Its Significance. (To be continued.) B. Robinson, Chicago.
61 Relation of Man to Nature (A Study Prompted by "Testimonies of the Sepulchres"). A. S. Ashmead, New York.
62 *Rupture of the Coronary Artery. J. R. Dean, Wheatland, Ia.
63 Unilateral Ascending Paralysis and Unilateral Descending Paralysis as New Clinical Types. C. K. Mills, Philadelphia.
64 Doses: "Maxima and Minima." J. R. Landers, Bernadotte, Ill.
65 Two Cases of Trichiniasis and Reference to Four Other Cases Infected from the Same Source. E. F. Tanke, St. Louis.

62. **Rupture of Coronary Artery.**—Dean was called suddenly to see a woman who was breathing with great difficulty and expectorating frothy mucus. She was in a sitting posture and unable to lie back in the chair. Previously her health had been good, except for occasional headaches. The pulse was intermittent and labored, 60 a minute. On auscultation he found loud blowing from fourth to sixth intercostal space. The heart was laboring so intensely that lifting was plainly seen through the chest wall. There were no valvular murmurs, but there was a very distinct churning sound, and there were many coarse râles over the left lung. He gave 30 minims of ergot, hypodermically, followed by 25 minims of adrenalin chlorid, 1/1000 as soon as it could be obtained. This dose was repeated in 30 minutes. The patient began to be relieved in 30 minutes. In two hours she could lie down. Adrenalin was continued in 10 minims doses by mouth for three days, followed by ½ grains of potassium iodid, every three hours, until the clot was absorbed. The lifting of the chest wall gradually subsided and at the end of a month the heart action was normal. Dean believes that this was a case of rupture of a branch of the coronary artery, and the interesting points about it are its abrupt beginning, the patient's previous good health, the sudden increase in bronchial secretion, and the prompt subsidence of the symptoms after the administration of adrenalin. In a second attack the action of adrenalin was positive. In the first one it was not possible to draw conclusions because ergot had been administered.

Adrenalin by the mouth failed to give results, but relief was immediate after the preparation was administered hypodermically.

The Medical Fortnightly, St. Louis.
July 10.

66 Sudden Abdominal Pain—Its Significance (concluded). B. Robinson, Chicago.
67 *Case of Diagnosed Carcinoma Ventriculi, with Rare and Unexpected Findings. J. E. Cook, St. Louis.

67. **Perforating Foreign Body in the Esophagus.**—The clinical findings and the previous history given by his patient led Cooke to make a diagnosis of carcinoma of the stomach. There was a steady loss in gait, cachexia, passage of a little fresh blood from the mouth with large tarry stools, epigastric tenderness, pain and difficulty in swallowing. The patient died. At the postmortem the following condition was found: Opposite the cricoid cartilage a piece of sharp triangular shaped tin measuring about an inch on each side had lodged in the esophagus perforating the walls on both sides into the posterior mediastinum, and causing a gangrenous abscess behind the esophagus, extending from the first to the fourth dorsal vertebræ.

Quarterly Journal of Inebriety, Boston.
June.

68 Unrecognized Toxic Insanities. T. D. Crothers, Hartford, Conn.
69 Relation of Alcohol to Tuberculosis. J. W. Grosvenor, Buffalo, N. Y.
70 Morbid Predisposing Causes in Dipsomania. W. L. Howard, Westboro, Mass.
71 Reflexes from the Eye in Narcosomania. T. H. Evans, Philadelphia.
72 The Alcohol Cult. (To be continued.) J. Madden, Portland, Ore.
73 Farmfield Reformatory for Inebriate Women, Horley England. T. D. Crothers, Hartford, Conn.
74 Comparison of the Effects of Alcohol and Opium. W. H. Park, China.

Texas State Journal of Medicine, Ft. Worth.
June.

75 Diagnosis of the Different Forms of Nephritis, and the Unreliability of the Nitric Acid Tests. A. Woldert, Tyler, Texas.
76 Medical Supervision of Public Schools. J. S. Lankford, San Antonio.
77 Laboratory of Clinical Pathology and its Relation to the Practice of Medicine and Surgery. J. T. Moore, Galveston.
78 Examination of Sputum by Expert Laboratory Methods, and its Clinical Significance. W. R. Howard, Ft. Worth.
79 Education in Sanitation. W. S. Carter, Galveston.
80 Facial Neuralgia and Subcutaneous Operation on the Infra-orbital Nerve. E. H. Cary, Dallas.
81 Diabetes Mellitus—Etiology and Therapeutic Possibilities. W. Wilson, Dallas.
82 A Plea for Higher Ideals in Medical Diagnosis and Therapy. S. A. Foote, Matagorda.
83 Skin Cancers and their Treatment. J. S. Shelmire, Dallas.
84 Atypical or Irregular Typhoid. J. E. Simons, Bay City.
85 Uncinariasis. W. P. Dunbar, Campbell.

Texas State Journal of Medicine, Ft. Worth.
July.

86 Imperfections of the Present Medical Practice Act of Texas. I. C. Chase, Ft. Worth.
87 Case of Multilocular Fibrocystoma Involving the Uterus. C. E. Cantrell, Greenville.
88 Our Commercial Relations With Central America, with Special Reference to Yellow Fever. W. M. Bromby, Houston.
89 Care of the Parturient Woman. G. B. Foscue, Waco.

Journal of the Michigan State Medical Society, Detroit.
June.

90 Education. D. Inglis, Detroit.
91 Popular Synthetic Remedies, their Use and Misuse. J. O. Schlotterbeck, Detroit.
92 Therapeutics of the Synthetics in General Use. F. L. Newman, Detroit.
93 Important Discoveries and Progress in Medical Science Since the Time of Hippocrates. P. H. Quick, Olivet.

Journal of the Michigan State Medical Society, Detroit.
July.

94 Small Hospitals for Small Places. B. H. McMullen, Cadillac.
95 Cytodiagnosis of Organic Psychoses. C. E. Simpson, Pontiac.
96 Uric Acid Diathesis. W. P. Gamber, Stanton.
97 Looking Backward. D. L. Walmsley, Detroit.
98 Principles of Treatment of Corneal Ulcerations. C. R. Elwood, Menominee.

Indiana Medical Journal, Indianapolis.
July.

99 Symptoms and Management of the Early Stages of Increased Blood Pressure. A. C. Kimberlin, Indianapolis.
100 *The Medical Profession and the Issues which Confront It. W. J. Mayo, Rochester, Minn.
102 Bites of Insects. I. Dyer, New Orleans.

100. See THE JOURNAL, June 9, 1906, page 1737.

Maryland Medical Journal, Baltimore.
July.

103 Present Aspects and Needs of the Milk Supply of Baltimore. C. H. Jones, Baltimore.
104 Medical Ethics. R. Brooke, Sandy Spring, Md.

Interstate Medical Journal, St. Louis.
July.

105 Classification of the Causative Factors of Railway and Allied Injuries, Based on the Kinesic States Assumed by the Injured Individuals—Along with an Analysis of 82,361 Railway Injuries. W. B. Outten, St. Louis.
106 Head Injuries, Scope and Importance of the Subject. F. R. Fry, St. Louis.
107 Indications for Immediate Operation in Head Injuries. M. A. Bliss, St. Louis.
108 Relation of Late Epilepsy to Head Injuries. S. I. Schwab, St. Louis.
109 Head Trauma and Psychoses. G. Campbell, Jr., St. Louis.

International Journal of Surgery, New York.
July.

110 Diagnosis and Treatment of Abdominal Contusions Associated with Visceral Injuries. J. R. Wathen, Louisville, Ky.
111 Some Untoward Effects of Prostatic Massage. H. Stern, New York.
112 Lavage of the Pelvis of the Kidney. A. M. Wose, Syracuse, N. Y.
113 Puerperal Septicemia. H. P. Jack, Canisteo, N. Y.
114 Operations on the Pelvic Organs During Pregnancy. S. E. Sanderson, Detroit, Mich.
115 Circumcision; Its Importance in the Treatment and Prevention of Certain Reflex Nervous Phenomena. M. H. O'Daniel, Bullards, Ga.
116 Three Year's Practice in Chinatown, New York. E. M. Bok, New York City.

Louisville Monthly Journal of Medicine and Surgery.
July.

117 Adenoids. P. R. Taylor, Louisville.
118 Cancer of the Gall Bladder and Ducts. J. G. Sherrill, Louisville.
119 Methods of Conserving the Natural Resistance in Surgical Cases. L. P. Spears, Louisville.
120 Four Cases of Prostatectomy. J. B. Bullitt, Louisville.
121 Dysmenorrhea. J. A. Freeman, Louisville.
123 George R. Tabor, M.D., State Health Officer and Surgeon General of Texas. F. E. Daniel, Austin.

Texas Medical Journal, Austin.
July.

124 Use and Abuse of the Stomach Tube. J. W. Torbett, Marlin.
125 Importance of some Symptoms of Uterine Fibroids. F. L. Barnes, Trinity.
126 Difficult Diagnosis of Yellow Fever Cases. I. Sexton, New Orleans.

St. Paul Medical Journal.
July.

127 Etiology of Syphilis. J. M. Armstrong, St. Paul.
128 Significance of Pain in Gynecologic Diagnosis. J. I. Rothrock, St Paul.
129 Tetany. C. R. Ball, St. Paul.
130 Rupture of the Quadriceps Extensor Tendon. H. Gage, Worcester, Mass.

Journal of the Kansas Medical Society, Lawrence.
July.

131 Conjunctivitis. D. F. Longenecker, Emporia.
132 What shall the Medical Profession do to Prevent Abortions? R. H. McDonnell, Pittsburg, Kansas.
133 Blood Analysis in Private Practice. L. W. Shannon, Hiawatha.
134 Neuroses of the Stomach. J. A. Milligan, Garnett.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal.

1 *Prevention of Difficult Labor. G. E. Herman.
2 *Management of a Case of Labor. C. E. Purslow.
3 *Case of Burrowing Tubo-ovarian Cyst, with Remarks on its Pathogenesis. W. S. Handley.
4 Achondroplasia. G. Rankin and E. C. Mackay.
5 *Meaning and Mechanism of Visceral Pain. J. Mackenzie.
6 Past, Present, and Future of the British Medical Association. H. R. Ker.

1. **Prevention of Difficult Labor.**—Herman reviews the causes of difficult labor and the management of this condition, but does not offer anything new.

2. **Management of Labor.**—Purslow discusses the doctor and the nurse, asking that both be well and healthy, as well as competent; the choice and preparation of the lying-in room; the preparation of the patient for the labor; the preparation of the hands of the obstetrician; the use of vaginal douches, which he absolutely forbids before labor; the use of forceps and the after-treatment. He describes his method of passing the catheter as follows: Place the patient on her back, with the knees drawn up. Cleanse the parts by gently wiping them with wool dipped in 1 in 2,000 sublimate solution. Take the

catheter in the right hand and hold it about two inches from the tip. (It is a good thing to put about three feet of India rubber tubing over the open end of the catheter; the urine is then conveyed out of the bed into a utensil on the floor.) Stand on the patient's right side and pass the right hand, holding the catheter under the patient's right thigh. Pass the left forefinger over the abdomen between the labia into the vagina. Then draw it upward exactly in the middle line until the pulp of the forefinger feels the orifice of the urethra. The meatus urinarius feels very like one of the small linen-covered buttons with which underclothing is often fastened: a little ring, with a slight depression in the center. When you feel this, draw the finger upward till it is just above the meatus, and then with the right hand pass the point of the catheter below the tip of the left forefinger into the urethra. If you can not succeed in thus quickly finding the meatus by the touch, it is better to look than to annoy the patient by prolonged attempts at passing the catheter by touch alone.

3. **Tubo-ovarian Cysts.**—Handley reports the case of a woman, aged 31, who five years ago began to suffer from pain in the lower part of the abdomen, worse on the left side, and eased by lying down. There was no increase in the size of the abdomen. Micturition was frequent; there was a feeling of weakness and some loss of flesh. A colleague diagnosed a broad ligament cyst and advised operation. The abdomen was opened and a left-sided cyst was exposed, lying in the broad ligament. The cyst burrowed right up to the point of the uterus. This tumor proved to be a tubo-ovarian cyst. The outer portion of the right tube was distended into a hydrosalpinx, which had burrowed in the broad ligament until it came in contact with the ovary. Within the ovary was a single cyst. The left ovary was not to be found.

5. **Visceral Pain.**—In this paper, the third in the series, MacKenzie discusses the mechanism by which visceral pain is produced, citing a number of cases in support of his views. He says that to begin with the viscera are insensitive to those stimuli which produce pain when applied to the external body wall. The visceral tissues can be cut, torn and burnt, and the individual remain unconscious of any sensation. Nevertheless, we all know that the viscera are capable of giving rise to pain of the most excruciating character, so that the reason the methods employed to produce pain in stimulating the external body will fail to produce visceral pain is manifestly that they are inadequate, and from this fact alone we are forced to conclude that a satisfactory explanation of how visceral pain arises has yet to be found.

The Lancet, London.

June 30.

7 Two Cases Illustrating Points in the Diagnosis of Tumor or Other Lesion of the Uncinate Region of the Temporosphenoidal Lobe. T. Buzzard.
8 *Submucous Excision of Deviations and Spurs of the Nasal Septum. St. C. Thomson.
9 *Epidemic Cerebrospinal Meningitis. W. Wright and W. Archibald.
10 *The Cammidge Reaction. A. E. Taylor.
11 *Treatment of Consumption in Sanatoriums. R. J. M. Buchanan.
12 Nervous Phenomena Following Attempted Suicide by Hanging. R. N. Hart.
13 *Salicylate Poisoning in Children. F. Langmead.
14 The Nature of Surgical Shock. W. Sheen.
15 *Cancer of the Esophagus Communicating with the Right Bronchus in which there was a Complete Absence of the Usual Symptoms. F. W. Price and J. G. Gibb.
16 Local Anesthesia and Anesthetic as Employed in Dental Extractions. Rhinologic and Minor Operations. D. L. Smith and J. T. Hughes.

8. **Submucous Excision of Nasal Septum.**—Thomson describes an operation which he recommends as entirely satisfactory for even the most marked deformities. The design of the operation is to excise all obstructing cartilage and bone, with any projecting spurs or ledges, while preserving intact the mucous membrane on each side. Anesthesia is produced by applying to the septum on each side inch-wide strips of sterilized ribbon gauze soaked in adrenalin chlorid containing 10 per cent. of cocain. The author describes in detail the technic of the operation, the making of the first incision, the raising of the convex flap, the incision through the septal cartilage, raising the concave flap, the excision of the septal cartilage and of bony spurs and deviations, stitching the wound and the after-treatment. The operation is in most respects similar to the one carried out by Killian. The advantages of this operation may be summarized as follows: (1) No general anesthetic is required; (2) no hemorrhage results; (3) there is absence of pain and of shock; (4) there is no reaction (the postoperative temperature seldom rises above 99 F); (5) there is absence of sepsis, with its possible extension to the ears, the sinuses or the cranial cavity; (6) no splints are required and no plugs after forty-eight hours; (7) rapid healing takes place, without crust formation; (8) there is no risk of troublesome adhesions; (9) the after-treatment is of short duration; (10) there is speedy establishment of nasal respiration; (11) it is suitable for all deformities of cartilage or bone in the septum requiring treatment; (12) the space gained is not only that resulting from a vertical septum, but the extra room secured by removal of the cartilage, which is sometimes one-eighth of an inch in thickness; (13) no ciliated epithelium is sacrificed; (14) accuracy of result can be depended on and the prognosis is, therefore, the more definite, and (15) improved appearance of the nose externally.

The special indications of this operation would appear to be: (1) Cases in which it is desirable to establish normal nasal respiration and to remove mouth breathing, with its numerous consequences; (2) correction of the disfigurement caused by the lower end of the quadrilateral cartilage projecting into one nostril; (3) the cure of reflex neuroses of the nasal organ; (4) the relief of Eustachian catarrh, and (5) the facility of treating nasal polypi and affections of the accessory sinuses.

9. **Epidemic Cerebrospinal Meningitis.**—Of the 17 cases reported by Wright and Archibald, 10 occurred in females, 5 in males and in 2 the sex was not given. Eight were in children under 5 years of age, all of which were fatal. Seven patients were between 6 and 11 years of age, among whom there were 3 deaths. In 11 cases the illness was ushered in with rigor, while this was not noted in the remainder. All the patients suffered from vomiting at the onset, and in 12 cases it is specially noted that this symptom was more or less continuous for hours or days. In 14 cases hyperesthesia associated with neuralgic pains was a prominent feature of the illness. The temperature was high and the pulse rapid in all instances except in one, where the pulse would appear to have continued slow. The tongue was furred and foul in five cases and sordes on the teeth occurred in three cases. There was retraction of the head in 11 cases with opisthotonos in three and tenderness of the spine in seven cases. Spasm of the muscles was specially noted in 8, in 2 temporary paralysis of one arm, and in another case of one leg is mentioned. In only 2 cases was it stated that the legs were drawn up on the abdomen. There were convulsions more or less continuous in 8 cases, restlessness in 7, moaning or screaming with pain in 5, grinding of the teeth in 1 case, delirium in 7 cases, squint in 5, severe headache in 8, unequal pupils in 3, dilatation in 4, and photophobia in 3. There were flushing and pallor at intervals in 6 cases the *tache cérébrale* only in 2. Herpes occurred in 3 cases, mottled purple on the body in 2, and a definite petechial rash in 5. Coma more or less profound preceded death in all instances and only in 2 cases in which recovery took place is it not mentioned. Of a total of 17 cases only 4 patients recovered, 2 within three weeks and 2 after a protracted illness.

10. **A Cammidge Reaction.**—Taylor considers this reaction a very valuable aid in the diagnosis of pancreatic disease, but by no means an infallible one. He has kept accurate analyses of the urines of 110 patients. Of these 110 urines, 9 gave a positive reaction and 101 a negative one; of the 101 negatively reacting urines, 21 gave a crystalline deposit with phenylhydrazin after hydrolysis with hydrochloric acid (these 21 urines gave no crystalline deposit with phenylhydrazin before hydrolysis, except one or two, which contained sugar; those which contained sugar were fermented with yeast until they no longer gave the crystalline deposit with phenylhydrazin), but the other tests of the Cammidge reaction series showed them to be cases other than of pancreatic disease or negatively reacting.

11. **Treatment of Consumption and Sanatoriums.**—Buchanan believes in the efficacy of the sanatorium treatment of phthisis, not only in mild cases, but in the more serious cases. He

says that the sanatorium method of treatment should be the first essential procedure and on it, as a foundation, all other therapeutic measures, whether medicinal or by the use of such agents as tuberculin, should be built.

13. **Salicylate Poisoning in Children.**—Langmead analyzes 8 cases, which make it evident that there is a great variation in the amount required to produce toxic symptoms, some children being poisoned with small doses, others with unusually large doses. The time to use the drug most cautiously is at the beginning of its administration, so that the personal factor may be estimated and any idiosyncrasy detected. The fact that all the patients were constipated before the onset of the symptom indicates clearly that the bowels must be kept well open while the salicylate is being given. The general similarity of the symptoms to those of diabetic coma suggests the giving of bicarbonate of sodium as a prophylactic and remedial measure. Langmead summarizes his paper as follows: 1. Salicylate of sodium sometimes causes in children symptoms resembling the acid poisoning of diabetes. 2. The toxic dose is variable, depending on the idiosyncrasy of the patient and the presence or absence of constipation. 3. Acetone may be detected in the urine and in the breath, its presence constituting one of the first symptoms of the poisoning and affording a valuable danger signal. 4. Treatment should be directed to keeping the acidity of the urine low and the bowels opened in cases of patients taking this drug. 5. If acetone is found or the urine gets more and more strongly acid, the salicylate should be omitted and alkali given alone.

15. **Cancer of Esophagus.**—In the case reported by Price and Gibb, from the time the patient came under observation to the time of his death there was no difficulty in or pain on swallowing, no regurgitation of food, no pain in the thorax or epigastrium, and no fetor of the breath; the voice was quite normal and there was a complete absence of paroxysms of coughing and dyspnea on attempting to swallow or after taking food, though food material must undoubtedly have reached the lungs, since the communication between the esophagus and the bronchus must have existed for some time before death. From the first to the last the patient swallowed perfectly comfortably and naturally and there was a complete absence of symptoms. Death was due to cachexia and pneumonia. On postmortem examination there was found in the anterior wall of the esophagus, at the level of the tracheal bifurcation, a malignant ulcer, two and a half inches in diameter, with hard white raised edges and a sloughing base, which had perforated, by a large aperture, the right bronchus near its origin. The perforation had the appearance of having existed for some time. The growth had given rise to no esophageal constriction. There were a few infiltrated glands in the neighborhood, but the tracheal glands were normal.

Dublin Journal of Medical Science.

May.

17 Bradycardia, with Arrhythmia and Epileptiform Seizures. J. M. Finney.
18 Case of Infantile Splenic Anemia. T. G. Moorhead.
19 Carcinoma Cutis, with Notes of Two Cases.—Cancer en Cuirasse; Paget's Disease of Nipple. C. M. O'Brien.
20 Intubation of the Larynx in Cases of Diphtheritic Dyspnea. G. B. Mec'aul.
21 Intramuscular Injection Treatment of Constitutional Syphilis. H. R. Ross.

Dublin Journal of Medical Science.

June.

22 Frontiers of Death in Surgery and the Question of Operation in Extremis. C. G. Cumston.
23 Urticaria Pigmentosa. W. Beatty.
24 Appendicitis. D. Kennedy.

Bulletin de l'Académie de Médecine, Paris.

25 (Year LXX. No. 25.) *L'indican et le scatol urinaires. G. Daremberg and T. Perrey.
26 *L'avortement epizootique, ou infectieu, des femelles domestiques, peut-il être une cause d'avortement chez la femme (Can epizootic abortion in domestic animals induce abortion in women)? E. Thierry.
27 Observation parisienne de pied de Madura (Madura foot, mycetoma). P. Reynier and Brumpt.

25. **Indican and Skatol in the Urine.**—Daremberg has been examining with various chemical tests the urine from 300 patients. The findings confirm his previous assertions that not every one with kidney disease has necessarily albumin in the urine, but that every one with albumin in the urine has some kidney affection. He found further that in 95 per cent. of the cases in which the urine contained an excess of skatol or of indican, there was likewise albuminuria. He concludes that the discovery of skatol or of indol indicates some functional disturbance in the kidney. Only 25 per cent., however, of the patients with albuminuria had any excess of skatol or of indol in the urine, and he believes that they must be due to some concomitant liver trouble. The larger the proportion of skatol, the greater the disturbance in the liver. He advises, therefore, examining the kidneys with especial care in case of an excess of indican, while an excess of skatol should direct special attention to the liver.

26. **Epizootic Abortion.**—Thierry relates a case and says that he knows of 2 or 3 others in which an epizootic and infectious affection causing abortion in cows was followed by the similar abortion of the women who had charge of the cows. The conditions of the abortion seemed to be identical in the women and in the animals. It occurs in the midst of apparent health, and the fetus and membranes are expelled together all at once, at about the fourth month. He advises warning pregnant women having to do with domestic animals suffering from this epizootic abortion of the attendant dangers.

Presse Médicale, Paris.

28 (XIV. No. 36.) The Physician and Truth.—Le medecin et la vérité. P. LeGendre.
29 (No. 49.) Médication phosphatée. A. Martinet.
30 *De la tuberculose genito-urinaire. F. Legueu.
31 (No. 50.) L'alimentation des classes laborieuses parisiennes dans la famille et aux restaurants populaires d'apres 2 enquêtes récentes. I. Bernard.
32 (No. 51.) *Surcharge graisseusse et zone de rupture dans le foie cardiaque (liver). E. Gerandel.
33 De l'examen du suc gastrique chez les gastropathes. L. Salignat.

30. **Genitourinary Tuberculosis.**—Legueu reviews recently published experimental researches which confirm the clinical findings and demonstrate that the genitourinary apparatus almost invariably becomes infected with tuberculosis by way of the blood, the bacilli first finding their way into the kidneys. Washed along by the urine, they pass into the ureter, and thence into the bladder. The prostate and the openings of the ejaculatory ducts readily become infected, the bacilli settling in these nooks before even the urethra or the bladder is definitely infected; from here the bacilli pass to the seminal vesicles and to the vas deferens, down to the epididymis, and finally to the testicle. Treatment, therefore, should go to the root of the trouble, which is in the kidney. There is no reason in removing the testicle, as it is the last to become infected, and is generally intact, the infection being restricted usually to the epididymis and the parts above. The only justifiable operations at this point are partial resection of the testicle, with removal of the epididymis and vas deferens. The kidney should be the main object of attack. It dominates and controls all the other lesions in the genitourinary apparatus, and it should be removed early, since it is from this source that the infection of the bladder, seminal vesicles, etc., has its origin and is kept up. The bladder receives the infectious materials from all sides, as it were, but it does not require surgical treatment. Once remove the sources infecting it and the bladder will soon recover its integrity.

32. **Zone of Rupture in the Liver in Heart Disease.**—Géraudel presents arguments to prove that the lesions in the liver in case of heart disease are primarily epithelial. These lesions favor the production of phenomena of enlargement and rupture. They are due to the hepatitis in the region of the hepatic vein. Mechanical phenomena come into play only secondarily.

Semaine Médicale, Paris.

34 (XXVI. No. 26.) *Les cholecystites typhoidiques suraigues. F. Lejars.

34. **Typhoid Cholecystitis.**—Lejars relates the case of an obese female patient, convalescing from typhoid fever, who suddenly exhibited symptoms suggesting perforation. The laparotomy revealed nothing but an inflamed and swollen gall bladder. It was removed and five gallstones were found in it. They had evidently lain latent for years until the typhoid fever had set up inflammation in the gall bladder. Operative treatment in such a case is as imperative, he states, as in case

of appendicitis or of intestinal perforation, and he urges physicians not to overlook the possibility of complicating cholecystitis in these cases.

Archiv f. Verdauungs-Krankheiten, Boas', Berlin.

Last indexed, XLVI, page 1733.

*35 (XII, No. 3.) *Experimentelle und klinische Untersuchungen über den Einfluss der Homburger Mineralwässer auf die sekretorischen Magen-Funktion (Homburg waters and gastric secretions). R. Baumstark.

36 *Influence of Various Mineral Waters on the Secretion of Gastric Juice.—Kasoistischer Beitrag zur vergleichenden Untersuchung des Einflusses verschiedener Mineralwässer auf die Magensekretion. K. Sasaki.

37 Chemistry of Gastric Digestion.—Zur Chemie der Magenverdauung mit bes. Berücksichtigung von H. Salomons Magen-Carzinoto-Probe. K. Reicher.

38 *Neue Gesichtspunkte über Wesen und Behandlung der Gicht (of gout). P. Roethlisberger.

35 and 36. **Influence of Mineral Waters on Gastric Secreting Function.**—Baumstarks' various tests and experiments resulted in an augmentation of the secretion of gastric juice in man and in animals, the average increase being over 74 per cent. of the increase after ingesting ordinary water. Sasaki's experiments showed that the secretion of gastric juice was always influenced by the mineral water, but that the proportions of the various elements of the gastric juice remained about the same. His tests were made on dogs with a Pawlow fistula.

38. **Essence and Treatment of Gout.**—Roethlisberger believes that constitutional gout and acute attacks of gout are two quite different things. The constitutional uric acid diathesis exists permanently, and on this soil the acute attack of gout develops which, in its essence, is more like acute articular rheumatism and is of infectious origin. Acute articular rheumatism affecting a single joint is called gout if the big toe happens to be affected, and not if it happens to be in another joint. Retention of uric acid seldom occurs in the young. The resistance to infectious diseases of persons during and past the prime of life, he attributes to the accumulation of immunizing substances in the body. The periodicity of recurring attacks of gout may be due, he thinks, to some transient immunization left from one attack, which dies out in time, leaving the way clear for renewed infection. The necrosis resulting from the compression of the accumulating urates offers a favorable soil for the development of an infectious process, and the local phenomena of an acute attack of gout certainly indicate the existence of some such process. Some infection, especially autoinfection, can generally be learned in the history of a case of gout. Digestive disturbances, catarrhal affections, bronchitis, influenza, erysipelas, pneumonia or the like are frequently mentioned as having preceded the acute attack. Premonitory pains in the limbs, palpitations, etc., are not rare, and indicate some intoxication from the intestines or from some focus of infection. The infectious germs in question are not very virulent, and an infectious process does not result until after the organism has been depressed from some cause. The prevalence of attacks of gout in the spring and fall is probably connected with the frequency of catarrhal affections of the upper air passages during these seasons. Severe purging is liable to bring on an acute attack of gout, probably from some superficial lesion of the intestinal epithelium. Another argument in favor of the infectious nature of the acute attack of gout is the frequent discovery of swollen lymphatics on the limb affected. In some instances these swollen lymphatics can be traced up the leg of the groin where enlarged glands can be palpated. Treatment should first aim to spare the kidneys and to favor elimination of uric acid. The clothing, exercising, etc., should be that found most beneficial in case of kidney affections. In case of an impending acute attack, search must be made for the portal of entry of the infectious agent, and antiseptics and the salicylates should be given, he states, with possibly disinfectants injected directly into the affected joint, and other antiphlogistic measures. The diet must be regulated to supply plenty of water. Bier's artificial hyperemia has been successfully tried. In the prevention of acute attacks the latent primary and metastatic foci of infection must be sought and exterminated, and the intestinal tract kept disinfected. Natural sulphur waters have long been found beneficial in this respect. They are particularly useful in the uric acid diathesis as they act as diuretics, while they spare the kidneys in other respects. The internal use of sulphur and guaicum has recently been highly recommended by C. W. Hufeland. Also hydrochloric acid by Falkenstein. Balneotherapy and all measures to stimulate metabolism are also useful aids in the breaking up and elimination of the deposits of urates.

Berliner klinische Wochenschrift.

39 (XLIII, No. 15.) Die paravertebrale Aufhellungszone bei pleuritischen Exsudaten (sogen. Garland'sches Dreieck) (resonant triangular area). O. Rosenbach.

40 Ueber die Komplementablenkung bei Präcipitations-Vorgängen (deviation of complements). H. Liefmann.

41 *Altes und Neues zur hydriatischen Technik. Winternitz.

42 Ueber abdominale Netztorsion und retrograde Incarceration bei vorhandenem Leistenbruch (torsion of omentum with inguinal hernia). M. Lüthauer.

43 Typhus, Wasser und Nahrungsmittel (typhoid, water and food). K. Kutscher.

44 (No. 16.) Einige Bemerkungen zur Methodik der experimentellen Krebsforschung (cancer research). E. F. Bashford.

45 Transitorische doppelseitige Amaurose mit erhaltener Pupillenreaktion und amnestische Aphasie nach Krampfanfall (transient amaurosis, etc., in an epileptic). H. Schmidt.

46 Zur Würdigung der Bottini'schen Operation. J. Cohn.

47 *Ueber Hämaturien. J. Vogel.

48 *Zur Erleichterung der Paracentese (improved technic). Stiel. (Cologne).

41. **Old and New in Hydrotherapy.**—Winternitz reiterates that the special procedure in hydrotherapy is of minor importance. The main point is the proper dosage of the thermic and mechanical stimuli. He has long advocated extreme simplicity in hydrotherapeutic measures so that any practitioner can carry them out in the patient's house, without the necessity for complicated apparatus or trained attendants. His simple appliance to allow a steam bath to be taken in an ordinary bathtub was described in 1893 (*Zeitft. f. Krankenpfl.* No. 1). The cold douche can be given after it by pouring a few pailfuls of water on the patient still reclining on the support of the bathtub. Winternitz has long preached the efficacy of roller bandages, wrung out of cold water, in the treatment of burns and ulcerative processes. The stimulus from the cold, the steaming and the reactive fluxion induce artificial hyperemia the same as Bier's technic. He has recently devised a special wet pack for the sacral region which can be applied under the bed clothes without assistance. The general practitioner, Winternitz states, will soon learn the value and benefit of stimulating packs when he can use these simple contrivances for hydrotherapy at the patient's home. Winternitz mentions in conclusion an appliance for thermic massage of vagina and rectum which he has recently invented. His communication was presented at the recent German Congress of Balneology, with demonstrations.

47. **Hematuria.**—Among the causes of hematuria reviewed by Vogel are hypertrophy of the prostate, tumors, pus pockets and pregnancy affecting the circulation in the small pelvis. He has lately had occasion to observe the case of a healthy young primipara who had suddenly a serious hemorrhage from the bladder at the seventh month. The urine was of normal amount and density and became clear on standing. The hematuria was not influenced by rest in bed. The patient was advised to keep about and to exercise a little, to promote the circulation in the parts, and the hematuria soon vanished. The fetus proved to be unusually large in this case. Varices are also liable to occur in the bladder, and bleed, as in a case personally observed. The tendency to hemorrhage in this case was successfully combated by injection into the bladder of 100 gm. of a 2 per cent. solution of gelatin, with rest in bed for several days.

48. **Improved Technic for Paracentesis.**—In country practice Stiel has found it difficult at times to incise the tympanic membrane on account of the dread of the patient or the restlessness of the child. All difficulty from this source has been obviated since he combines the ear speculum and needle. The needle is held in a hollow groove in the ear speculum and is introduced in the latter without knowledge of the patient, who submits readily to the introduction of the speculum. Another advantage is that the path of the needle is thus prepared for it and it can not go astray.

Deutsche Medizinische Wochenschrift, Berlin and Leipsic.

49 (XXXII, No. 22.) Maximal Doses of Drugs not in German Pharmacopeia.—Ueber Maximaldosen von Arzneimitteln, welche in dem Deutschen Arzneibuche nicht enthalten sind L. Lewin.
50 *Ueber spontane Affen-Tuberculose (in monkeys). L. Rabinowitsch.
51 Weitere Mittheilungen ueber den Nachweis der Spirochæta pallida im Gewebe (in tissues). E. Hoffmann and A Beer.
52 *Vermerthbarkeit der Sahlischen Desmoid—Reaktion. A. Alexander and A. Schlesinger.
53 Ueber das Auftreten von Spirochäten verschiedener Form in Mageninhalt bei Carcinoma ventriculi. W. Krienitz.
54 *Zur Frage der visceralen Gicht, speziell ihrer gastro-intestinalen Formen (gout). H. Richartz.
55 Ueber die Wirkung des Iods auf das durch Adrenalin erzeugte Atherom der Aorta. P. Boveri.
56 Abdominal Pregnancy carried to term with Placenta implanted on under surface of Liver and Gall Bladder.—Fall von ausgetragener Bauch-Höhlenschwangerschaft. L. Seelig-mann.
57 *Sind die bei der akuten Gonorrhoe des Mannes üblichen Injektionen eine rationelle Behandlungsweise? Canon.

50. **Spontaneous Tuberculosis in Monkeys.**—Rabinowitsch has examined 45 monkeys of various species affected with spontaneous tuberculosis. The monkeys had all been kept in captivity in Germany. The majority were found infected with human tubercle bacilli, others with bovine, and one monkey with fowl tubercle bacilli.

52. **Sahli's Desmoid Test of Stomach Functioning.**—Alexander and Schlesinger state that the irregularity in the findings of this test detract materially from its reliability. The reaction was occasionally positive in cases in which the secretion of gastric juice was reduced to the minimum, and it was sometimes negative when the gastric functions were quite normal. For comparison, they tabulate the details in 48 cases. Sahli's test was described in these columns, page 1820 of volume XLIV, 1905.

54. **Visceral Gout.**—Richartz writes from Homburg to describe 2 cases of supposed gastrointestinal troubles benefited by anti-gout measures. In one instance there was nothing to indicate gout. The symptoms were sudden attacks of severe pain in the abdomen, lasting sometimes for three days, but subsiding as soon as vomiting occurred naturally. Artificially induced vomiting did not relieve. The attacks recurred three or four times a year and were followed by loss of appetite and physical depression for several days. The affection had lasted for 22 years, and owing to the missing kneejerk had been diagnosed by Charcot as tabetic gastric crises. There were no signs nor history of syphilis and no benefit had been derived from mercurial or other treatment. No symptoms of tabes had developed, and the patient, a man of 63, was otherwise in good condition. There were no joint symptoms but a small nodule resembling a tophus was found just above the elbow, and the patient said that he had a tendency to lumbago and that his grandfather and uncle had suffered from gout. The trouble was therefore ascribed to atypical gout, especially as the blood just after an attack contained crystals giving the murexid reaction, and a large percentage of uric acid was found in the urine. The patient was ordered to restrict himself to a "purin-free" diet, and during the nine months since he has been entirely free from any attacks. In another case there were subacute, inherited joint symptoms, accompanied at times by violent pains in the epigastrium, nausea and vomiting, the gastric attack lasting from two to five hours and leaving the patient, a woman, depressed for a couple of days. When the gastric attacks came on the patient always noticed amelioration of the joint symptoms. After complete failure of the usual measures the patient was ordered to refrain from meat, and to supply the needed albumin with milk. Bread, occasionally eggs, and free use of vegetables and fruit supplemented the milk. The improvement in the joint troubles was rapid and pronounced. During ten months there was no recurrence of the gastric attacks which used to come on every month or so. The joints subsided to their normal aspect and were entirely free from pain. Then the patient was advised by her home physician to resume eating meat during convalescence from an intercurrent disease. Very soon the old joint pains and swelling returned, and in two weeks she had one of the old violent gastric attacks which relieved the joint troubles for a few days as of yore.

57. **Disadvantages of Injections for Acute Gonorrhea.**—Canon thinks that the urine performs the task of washing out the urethra better than it can be done artificially. He advises measures to promote diuresis and to medicate the urine by internal drugs. Injections are liable to do far more harm than they can possibly do good, he says. The gonococci pass almost regularly into the blood but soon succumb there unless they find a place of lessened resistance where they can colonize. Such an opportunity is liable to follow urethral injections as they may set up inflammation, both by eroding the mucosa and by introducing pyogenic germs from without.

Münchener Medizinische Wochenschrift.

58 (LIII, No. 15.) Die Diagnose und Prophylaxe der Labyrinth-Entzündung bei der Akuten Mittelohrentzündung (otitis media). Ostmann.
59 The Incisions in Abdominal Operations.—Ueber die Anlegung der Schnitte bei den Bauch-Operationen. Heusner.
60 Differentiation of Serious Appendicitis.—Können wir die schweren, die sofortige Operation erfordernden Appendizitis fälle erkennen? Krecke.
61 *Zur geburtshilflichen Therapie der Eklampsie (obstetric therapy). Esch.
62 *2 Fälle von Milz-Ruptur (of spleen). Georgi.
63 Diaphragma der Trachea im Anschluss an Diphtherie und erschwertes bezw. unmögliches Decanulement. H. Strohe.
64 *Zur Kasuistik der Fremdkörper im Magen und Darmkanal (foreign bodies in stomach and intestines). Weisbart.
65 *Hof Bafhs in Treatment of Superficial Inflammations.—Ueber die Behandlung entzündlicher Prozesse der Haut mit heissen Bädern. Richter.
66 2 Apparate zur Sehscharfenprüfung (to test vision). Hoppe, Cologne.
67 Synthesis of Proteids.—Die Untersuchungen von Prof. Emil Fischer seiner Schüler ueber Synthese der Polypeptiden. N. Seiber.
68 Das Neueste Ueber Organtherapie. Hager.
69 (No. 16.) Ueber Alkoholismus in München. E. Kraepelin.
70 Ueber Pupillenstarre im hysterischen Anfall (immobility of pupils). Bumke.
71 *Ueber uraemische Neuritis. R. Dunger.
72 Wearing-out from Over-function.—Aufbrauch durch Hyperfunktion. Lilienstein.
73 *Ein eigenartiger Verlauf und Obduktionsbefund von chronischer Herz-Tuberkulose (of heart). Knauth.
74 Zur Frage der konservativen Myom-Operationen. A. Hengge
75 *Schalldämpfer (to shut out sounds from the ear). Küppers, Düsseldorf.
76 Weiteres aus der modernen Immunitäts-Lehre. W. Weichardt.
77 Zur Geschichte des Deutschen Vereins für Psychiatrie (historical sketch). Pelman.

61. **Obstetric Treatment of Eclampsia.**—Esch writes that in at least three-fourths of the cases of eclampsia at Olshausen's clinic the convulsions did not recur after delivery. The mortality was only 16.8 per cent. among the women artificially delivered, and 20.8 per cent. among those spontaneously delivered. The mortality was higher in elderly primiparæ; the mortality in 145 patients treated expectantly was 28.9 per cent., while it was only 19.8 per cent. in 101 cases with active intervention. Zweifel has reported a mortality of 32.6 per cent. with expectant and of 15 per cent. with active measures. In the last series of 36 cases in the Olshausen clinic the mortality was 22.2 per cent., notwithstanding extremely active treatment. The fact that the first attacks came on during the puerperium in 15 per cent. of all the cases speaks against the assumption that immediate delivery is indicated in all cases. Treatment must be individualized principally according to the degree of eclamptic intoxication. The prognosis is grave when profound coma is observed without previous convulsions or with the first attack. He has found 7 such cases in the literature and observed 3 in the clinic. These patients all died. The patients all died also in the 8 cases with icterus and in 10 of the 13 cases with hemoglobinuria. In 59 out of the 83 fatal cases albumin and formed elements had abounded in the urine. Patients who have been weakened by numerous attacks are also in a serious condition. In all these cases prompt delivery is indicated, but expectant treatment is justified when the signs of intoxication are less severe.

62. **Rupture of Spleen.**—The hemorrhage in the child in the first case was so severe that the symptoms of shock and of internal hemorrhage blended and grew constantly worse in less than half an hour and the child succumbed in three hours, notwithstanding the prompt removal of the ruptured spleen. In the second case a girl of 4 had been run over by a cab. The symptoms of shock subsided, the pulse become slower and fuller, and not until after seven hours were signs of internal

hemorrhage observed. The abdominal walls did not become rigid until ten hours after the accident; the child had vomited blood twice during the interim. The abdomen was opened at about the twentieth hour and the ruptured spleen removed with the apparent complete recovery of the child. The lower pole of the organ had been partly torn off. In a third case in which the symptoms indicated rupture of the spleen the exploratory laparotomy revealed merely a few small subserous hemorrhages, and the abdomen was sutured without further intervention, followed by the complete recovery of the patient.

64. **Foreign Bodies in Digestive Tract.**—Weissbart relates a case diagnosed as a gallstone impacted in the cystic duct with enlargement of the gall bladder. The patient suffered from colics, which even morphin was unable to relieve. There was a history of long preceding gallstone and kidney stone attacks and a gouty family history. The patient suddenly experienced complete relief from all her pains, which suggested the possibility that a foreign body might have been the cause, and search in the stools revealed a piece of bone 3.5 cm. long by about 1 cm. in diameter. The patient had no knowledge of ever having swallowed the bone. It had probably become impacted in the duodenum and obstructed the bile duct, hence the acholic stools and the congestion in the gall bladder.

65. **Hot Baths in Treatment of Superficial Inflammations.**—Richter reports his success with the old hot-bath treatment. He has treated 330 workingmen with various injuries of the soft parts, felons, furuncles and phlegmons, with the systematic use of local hot baths. He orders the patient to put the hand, arm, foot or leg into water as hot as can be borne and to keep it in the water for from half an hour to an hour, pouring in hot water from time to time to keep the temperature at about the same point. This procedure is to be repeated several times a day. A little soda, about half a tablespoonful to a quart of water, is added. He believes that the principle of this treatment is about the same as that of the Bier method, attracting the blood more actively to the part to aid in combating the local infection. The results have been extremely satisfactory. Pus was evacuated by an incision at the proper time.

69. **Alcoholism.**—Kraepelin remarks that alcohol is the direct cause of about one-third of all the mental affections observed at Munich, besides the havoc otherwise wrought. If alcohol could be swept out of existence, he states, his clinic would lose half its patients. As this can not be done, at least sufficient arrangements should be made for the prompt and proper treatment of alcohol addictions. If this were done, two-thirds of the present evils, he thinks, could be eliminated, and the hospitals, asylums, prisons, poorhouses and courts would be immeasurably relieved.

71. **Uremic Nephritis.**—A previously healthy man of 27 became affected with acute hemorrhagic nephritis. As it subsided a typical severe neuritis developed in the left brachial plexus and median nerve, manifestly of uremic origin.

73. **Tuberculosis of the Heart.**—In the case reported autopsy revealed the heart to be in a condition of almost complete caseous degeneration, the result of a chronic tuberculous process, which, in the course of a year, had entailed miliary tuberculosis, with death from tuberculous meningitis. The surprising feature of the case was the fact that the patient had been able to perform military duties for nine months of this period, and that the organ showed no signs of weakness until toward the very last, although only a few of the columnæ carneæ were still sound.

75. **Stopper for the Ear.**—Küpper uses a small loop of silver wire, the ends twisted together in a small coil. Wax is then molded over this coil to make a small ball, with which the ear is plugged. The wax adapts itself to the shape of the meatus and can scarcely be called a foreign body, while it shuts out external noises completely.

Wiener Klinische Wochenschrift, Vienna.

Last Indexed XLVI, page 848.

78 (XVIII, No. 48.) Ueber die Beeinflussung des hämolytischen Komplements durch Agglutination und Präzipitation. A. Klein.

79 Ueber das Wachstum obligatorischer Anaeroben auf Kulturmitteln in aerober Weise (aerobic growth of anaerobies). A. Wrzosek.

80 *Ueber ein anatomisches Stigma angeborener tuberkulöser Disposition. J. Sorgo and E. Suess.

81 Bericht ueber weitere 50 operierte Gallensteinkranke. F. Fink (Carlsbad).

82 Ueber das Mosersche Scharlach-Serum (scarlet fever serum). R. Bukowski.

83 (No. 49.) Relations between Composition and Tension of Blood.—Ueber die Beziehungen zwischen Blutdruck und Zusammensetzung des Blutes. T. Holobut.

84 Die lokale Behandlung der Prostatahypertrophie mit den radioaktiven Thermen in Gastein. S. Altmann.

85 Zur endoneuralen Injektion des Tetanus-Heilserums. P. Clairmont.

86 Ueber ungewöhnliche Erscheinungsformen des Lupus erythematodes. W. Pick.

87 *Vorläufige Mitteilung ueber interne Urethrotomie. C. Ravasini.

80. **Sign of Congenital Tendency to Tuberculosis.**—Sorgo and Suess have found in their experience that the mamma on the side of a unilateral tuberculosis process is always smaller in all respects than its mate. Among 111 tuberculous female patients examined the areolæ were of unsymmetrical size in 52, and among these the tuberculous process was unilateral in 18. In every instance the smaller nipple and areola were on the side of the morbid process (right 12, left 6). In 19 others the process was predominantly on one side, and this side was always that of the smaller areola (right 5, left 13). Similar proportions were found in 168 male tuberculous patients examined. The findings suggest an unmistakable connection between the comparative atrophy of the one breast and the predisposition to tuberculosis of the lung beneath.

87. **Internal Urethrotomy.**—Ravasini reports that internal urethrotomy has been done in 436 cases at Nicolich's clinic at Trieste. The results have been extremely satisfactory, with no mortality from this cause during the last ten years. He uses a special urethrotome of his own devising, described in the *Paris Ann. d. Mal. Org. Gén.* for January, 1901. He leaves a catheter in the bladder for thirty-six hours and warns the patient to introduce a bougie occasionally, as there is danger of recurrence of the stricture after this as after other methods of treatment.

Zeitschrift f. Geb. und Gynäkologie, Stuttgart.

Last Indexed XLVI, page 148.

88 (LVII, No. 2.) *Protection of Parturients.—Zum Schutz der Gebärenden. S. Rosenfeld (Vienna).

89 *Neuritis puerperalis lumbalis peracuta. E. Hauch.

90 Seltenere Formen der Ovarial-Dermoide. A. Falkner.

91 *Rückblicke und Ausblick über Operabilität, Operation und Operations-Resultate des Uterus-Karzinoma an der Hand einer 11-jährigen Beobachtung. W. Hannes (Küstner's clinic, Breslau).

92 *New Frozen Section of the Body of a Parturient Dying at the Expulsion Period.—Ein neuer Gefrierschnitt durch die Leiche einer in der Austreibungsperiode verstorbene Kreissenden und seine Bedeutung für die Lehre vom unteren Uterin-Segment. E. Bumm and L. Blumreich.

93 Treatment of Postpartum Period.—Zur Behandlung der Nachgeburtszeit. F. Strassmann.

88. **Protection of Parturients.**—Rosenfeld reviews various statistics and his own and others' experience (all in Austria), coming to the conclusion that obstetric operations are done unnecessarily in a great many instances. He thinks this is due partially to the fact that the physicians, being private practitioners, display much greater deference to the wishes of their clients than would be the case if they were salaried officials, independent of fees. The larger fee in case of an operation he leaves out of the question. He refers to the eventuality of the entire medical profession becoming a salaried branch of the public health service, but adds that this is still a very remote possibility. "Only, however," he adds, "when a physician is entirely independent of the fee from case to case can he carry his scientific convictions to their ultimate consequences. The unnecessary operations are not done from scientific conviction." Another safeguard, he thinks, would be to insist that no obstetric operation could be performed without the presence of a second obstetrician or of a medical assistant. All these propositions, he concludes, are merely "pious wishes," with no chance of their realization at present. All that can be done now is for the professors in the medical schools to preach more forcibly than hitherto the necessity not to do harm in obstetric practice. He seems to think that, in obstetric cases especially, "fools rush in where angels fear to tread."

89. Puerperal Lumbar Neuritis.—Hauch states that this form of neuritis was observed in 32 out of 680 parturients at Leopold Meyer's maternity at Copenhagen. The symptoms were tenderness of the nerves of the leg, paresis, pains, hyperesthesia of the skin and in some cases exaggeration of the knee jerk. The symptoms observed indicate that this extremely severe puerperal lumbar neuritis is due to puerperal intoxication, inducing transient inflammation of the nerves connected with the lumbar plexus. The affection and the pains originate or are aggravated by various occasional causes. The pains and heaviness in the legs are seldom mentioned by the patients, as they assume them to be part of the phenomena of childbirth. The neuritis can be differentiated from phlebitis by the fact that with the latter the tenderness is more toward Scarpa's triangle than in case of neuritis; fever and edema are usually observed, and the swollen veins can be palpated. With phlebitis there is nothing like the radiating pains extending along the inflamed nerves, nor the superficial hyperesthesia, nor the tenderness at the merging points of the nerves. The neuritis subsides completely in from four to eight days, as a rule, although it has been known to last for three weeks. Electrotherapy is not necessary. Boers has witnessed good results from blisters. Basedow recommended bandaging the limb, and Krieg gave ergot, as he said, "to bring back to the uterus the runaway labor pains."

91. Carcinoma of the Uterus at Breslau.—A reply postal card was sent out from Küstner's clinic to all the women who had been operated on for cancer of the cervix from 1895 to 1901, asking the present condition of their health, whether they have any disturbances at present like those before the operation, and in case of death requesting the family or the local authorities to give the date of death. About 122 replies were received, 31 referring to vaginal and 91 to abdominal operations. It was found that 8.7 per cent. of the abdominal and 15 per cent. of the vaginal patients had died. A personal letter was then written to the women found to be still living, asking them to come to the clinic for examination; about half of them came. All were healthy and free from signs of recurrence. The various features of this material of 145 cases of carcinoma of the cervix are discussed at length. The operability of the cancers has increased from an average of 45 to nearly 69 per cent. in 1903-1906. In conclusion Hannes remarks that Küstner has almost entirely abandoned the vaginal route at present. It is possible that much careful study of the patients operated on by a laparotomy may enable conclusions to be drawn in regard to glandular involvement which will demonstrate that certain special forms of cancer of the cervix are free from glandular metastasis. If this can be demonstrated, then this form can be operated on safely by the vaginal route.

92. Section of Parturient Cadaver.—Bumm and Blumreich give an illustration of a frozen section of a cadaver of a parturient in the expulsion stage. They also reproduce illustrations of the similar sections that have been made heretofore by Mars, Zweifel, Chiari, Leopold, Barbour, Webster and others. They discuss the mechanism of birth from the conditions observed, especially in regard to the behavior of the lower segment of the uterus.

Zeitschrift f. Krebsforschung (cancer research), Berlin.

Last indexed XLIV, page 115.

94 (III, No. 2.) *4 Fälle von osteoplastischem Prostata-Carcinoma. W. Fischer-Defoy.
95 Ueber Pseudo-Parasiten der Carcinome. P. G. Unna.
96 Die Beziehung gewisser Sarkome zu den Angiomen. D. v. Hansemann.
97 Resistens-Fähigkeit der roten Blutkörperchen in den Fällen von Scheiden- und Gebärmutter-Krebs (red corpuscles with cancer). K. Schmidlechner.
98 Origin of Cancer.—Ursache des Krebses. G. Kelling. Id. H. Ribbert. Id. E. Kromnecher.
99 (Nos. 3-4.) *Ueber die Bilharzia-Krankheit vorkommenden Blasen-Tumoren mit bes. Berücksichtigung des Carcinoma (in bladder). C. Goebel (Breslau).
100 Zum Stande der Krebs-Therapie (of cancer). O. Lassar.
101 2 seltene Carcinom-Fälle, zugleich ein Beitrag zur Metaplasie-Frage. R. Lewisohn (Heidelberg).
102 Histogenese des primären Leberkrebses (cancer of liver). L. Polak-Daniels (Haque).
103 Theory of Tumor Formation.—Kritische Bemerkungen zur Geschwulst-Lehre. D. v. Hansemann.
104 Origin of Pilmoer's Bodies in Degeneration of Nuclei.—Entstehung Pilmerscher Körnerchen aus Kerndegenerationen. H. Apelant und G. Embden.

94. Osteoplastic Cancer in Prostate.—Four cases of primary osteoplastic carcinoma are described as they have come under observation at Dresden. Twenty other cases are also reported in which the cancer or metastasis was in a bone. The etiology and symptoms are analyzed, and the point emphasized that the spleen was involved in the metastasis in only one of the total of 24 cases. The spine and femur are now examined regularly at the autopsy in every cancer case. Metastasis in spine or femur was found in 24.4 per cent., although diagnosed only once during life.

99. Cancer in Bladder in Bilharzia Affections.—Malignant tumors form fully 50 per cent. of the numerous tumors observed in the bladder in cases of bilharzia affections. There is an evident connection between the bilharzia cystitis and the malignant growth. It must be classed with cancer in chimney-sweeps, tobacco-smokers, etc., but affords no evidence in favor of a parasitic etiology for cancer. Goebel's article is accompanied by 54 plates, many of them colored.

Riforma Medica, Naples.

Last indexed XLVII, page 254.

105 (XXII, No. 14.) Origin of Rice Bodies in Tuberculous Processes.—Sulla genesi dei corpi orizoidei nelle tendovaginiti croniche tubercolari a granuli risiformi. O. Cignozzi.
106 5 casi di ragade anale post-partum (fissures). F. Pellizzari.
107 (No. 15.) *Contributo sperimentale alla patogenesi dell' ulcera rotonda dello stomaco. G. Zironi.
108 Malattia di Erb. A. Testi.
109 (No. 16.) Infantilismo con gastrosuccorrea di Reichmann ed accessi di tetania. M. Landolfi.
110 Action of Chloroform on the Blood.—Sull' azione della cloronarcosi sul sangue. A. B. Gianasso.
111 *Treatment of Pneumonia.—Un nuovo metodo di cura della polmonite crupale. S. Pulverenti.
112. (No.17.) *Sull'etiologia e per la diagnosi di ascesso epatico (liver abscess). U. Gabbi.
113 (No. 18.) *Sul cancro dello stomaco in chirurgia. I. Tansini.
114 *L'embolia dell'arteria polmonale nella febbre tifoide. R. Massalongo.

107. Pathogenesis of Round Ulcer of the Stomach.—Zironi resected the vagus below the diaphragm in 14 rabbits. When killed, after an interval of 11, 17, 30 and 60 days, an unmistakable round ulcer was found in 6 out of the total material. In 4 the ulceration was single and in 2 double. The findings showed that the ulcers had developed soon after the operation and that they manifested a tendency to heal spontaneously.

111. Treatment of Pneumonia.—Pulverenti explains the onset of pneumonia as due to lowering of the resisting powers at some point. Getting chilled causes ischemia, and this is always followed by hyperemia. In hyperemia the walls of the vessels become distended and stretched and thus more porous, allowing abnormal osmosis and permitting the germs in the blood to pass through the walls of the vessels into the tissues and those in the tissues to pass into the blood. The same thing is liable to occur when there have been excessive demands on an organ, the overfunctioning inducing hyperemia and distension of the vessel walls. This is the reason why pneumonia is liable to develop after a person has been chilled. The causal factor common to all such cases is the reduced tonicity of the vessel walls. Besides the hyperemia, the increased warmth in the part and the transudation provide additionally favorable conditions for the proliferation of the infectious germs. The therapeutic indications, therefore, are to restore normal tonicity to the vessel walls and thus to arrest the process in its incipiency. He thinks that this can be done with the antipyretics. They owe their antithermic action, he asserts, to their influence in restoring normal tone to the vessel walls. This vasoconstricting action is beneficial in disease, but the blood vessels are not all capable of an equal degree of constriction. The blood forced out of the contracting vessels escapes into those which do not contract so readily. These are cutaneous blood vessels, and those in the mucosæ of the accessible cavities. This explains the injurious influence of the antipyretics on the digestive tract, as they induce congestion there as well as in the skin. He gives a number of examples from his clinical experience to sustain these views and to demonstrate the marked neurospastic and consequently antiphlogistic action of the antipyretics. He has treated 106 patients according to these principles, and the results have confirmed him more and more in the belief of their importance in the therapeutics of pneumonia. The disease

was aborted, he states, in 40 per cent. of the cases. He supplements the drug treatment with venesection at need, but prefers leeches applied directly to the thorax. The principle is similar to Bier's suction therapy. From 75 to 250 gm. of blood drawn by from 5 to 10 leeches proves more effectual than twice this amount taken from the arm. All drugs should be avoided which have a dilating action on the blood vessels, especially quinin. He restricts his patients to a liter of milk and 3 eggs a day, keeping the digestive functions working well by appropriate measures.

112. **Diagnosis of Abscess of the Liver.**—Gabbi gives the particulars of 6 cases. The pains in one case were paroxysmal and the liver was movable; the abscess was comparatively deep. The pains in this case must have been due principally to the rapid distension of the capsule. The intensity of the pain was never proportional to the size of the abscess, but only to its nearness to the surface. In one case in which the abscess was close to the capsule the pain was so intense as to require morphin, and yet the abscess was a very small one. When the pain was in the scapular region the abscess was found in the convexity of the liver, and when in the lumbar or ileocostal region it was in the lower half or the outer part of the right lobe. The pains in one case and the findings simulated a gallstone affection. The lower aspect of the liver in this case was adherent to the posterior abdominal wall, producing the lumbar and ileocostal pain. Gabbi states that the liver may apparently descend with the excursions of the diaphragm, when in fact its posterior aspect is adherent to the abdominal wall, and the apparent descent is merely a bending forward. This can be detected by watching the lower outline of the liver dullness during respiration. In 2 of his patients the liver felt hard, and yet the abscesses were found close to the surface. These findings were in alcoholics whose livers were more or less indurated, and they suggest the importance of the history in these cases. The diagnosis of abscess need not be discarded on account of the palpation of an apparently uniform hard surface.

113. **Cancer of the Stomach.**—Tansini, professor of surgery at Pavia, here remarks that surgery is not the ideal treatment of cancer, although it is the only effectual means at our disposal at present. The mysterious biochemical processes which generate and maintain cancer should be combated with measures of the same nature. As nations, however, are still obliged to go to war to decide certain controversies by the sword, so cancer has still to be subjected to the knife. He expatiates on the importance of an early exploratory laparotomy, which is comparatively harmless in the early stages, but is contraindicated, he adds, in case of icterus, as this indicates involvement of the bile duct. The presence of enlarged glands in the left clavicular fossa is also a contraindication, but if it is the only one he sometimes excises one of the glands for microscopic examination. It is possible that the swelling of the glands may be due solely to some ordinary inflammatory process. Another specific contraindication to an exploratory laparotomy is the prominent development of the subcutaneous veins in the abdomen, associated with ascites, the result of disturbance in the deeper vessels. The uterus and ovaries also should always be examined for metastatic involvement. In 2 cases recently he noticed a certain tumefaction of the abdomen; as a rule the abdomen is usually sunken in cancer patients. He refrained from the exploratory laparotomy on account of this tumefaction, and the autopsy later revealed cancerous lesions in the splenic flexure and descending colon. He remarks that "juxta-pyloric cancers" are most easily diagnosed and give the best results to operative measures. Cancer of the lesser curvature may exist for a long time without interfering with digestion and assimilation, so that the patients do not become emaciated. Tabora even had a patient gain in weight. The emaciation parallels the stenosis of the pylorus. The movability of the juxta-pyloric region may lead to errors in diagnosing a cancer in this region. In one of his patients the tumor was found in the center of the left hypochondrium and was mistaken for the spleen. It is frequently mistaken for a movable kidney, which sometimes induces gastric disturbances. In discussing the technic for exploratory laparotomy he remarks that he refrains from lavage of the stomach when possible, as the patients dread it so much. If there is hyperacidity the stomach content will not prove very infectious if some should escape into the peritoneum during the operation. He has witnessed cases in which the peritoneum was much soiled with the hyperacid stomach contents, and yet no septic peritonitis resulted. He regards pylorogastrectomy as far superior to gastroenterostomy, suggesting the advisability of doing the latter as a preliminary to the former, as tracheotomy is done as a preliminary to extirpation of the larynx. He has frequently had to perform a secondary pylorogastrectomy on account of disturbances persisting after a gastroenterostomy.

114. **Embolism of the Pulmonary Artery in Typhoid Fever.**—Massalongo has had occasion to observe 2 cases of fatal embolism of the pulmonary artery, occurring as convalescence from typhoid commenced. The patients were young women. He is inclined to believe that this is probably a more frequent cause of death in typhoid than is generally recognized.

Books Received

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

A COMPEND OF OPERATIVE GYNECOLOGY, Based on Lectures in the Course of Operative Gynecology on the Cadaver at the New York Post-Graduate Medical School and Hospital, delivered by W. S. Bainbridge, M.D., Adjunct Professor of Operative Gynecology on the Cadaver, New York Post-Graduate Medical School and Hospital, etc., Compiled with Additional Notes, in Collaboration with Harold D. Meeker, M.D., Instructor in Operative Gynecology on the Cadaver, New York Post-Graduate School, etc. Cloth. Pp. 66. Price, $1.00 net. New York: The Grafton Press, 1906.

A COMPEND OF PHARMACY. By F. E. Stewart, M.D., Ph.G., Charter Member of the American Therapeutic Society, etc. Based on Prof. Joseph P. Remington's Text-Book of Pharmacy and the United States Pharmacopœia, Eighth Revision (1905), Sixth Edition, Revised and Enlarged, with a very complete Index and Table for Converting English Measures into Metric and the Reverse. Cloth. Pp. 187. Price, $1.00. Philadelphia: P. Blakiston's Son & Co., 1906.

ECZEMA. A Consideration of Its Course, Diagnosis and Treatment, Embracing Many Points of Practical Importance, and Containing 146 Prescriptions, Illustrating Dosage in Local Applications. By Samuel H. Brown, M.D., Assistant Dermatologist, Philadelphia Hospital, etc. Cloth. Pp. 105. Price, $1.00. Philadelphia: P. Blakiston's Son & Co., 1906.

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